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MASTER THESIS

Empowering leadership and work engagement

A diary study on the dimension specific effects of empowering leadership on work engagement: The mediating effect of psychological empowerment and self-goal-setting

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Empowering leadership, work engagement, psychological empowerment and self-goal-setting

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Abstract

This diary study contributes to the leadership literature by examining the daily effect of empowering leadership behaviours (autonomy- and development support) on follower's daily level of work engagement. Contrary to previous research on the topic, this study distinguished between the relative contribution of each dimension of the empowering leadership concept. In addition, it was examined *how* and *why* each dimension contributes to work engagement by including a mediator variable for each relationship. The study is based on data collected in cooperation with the Royal Norwegian Naval Academy. While traveling by sail ship, 87 cadets filled out a daily diary questionnaire over the course of 30 days. As predicted, multilevel analyses revealed that the cadets were more engaged in their work on days when their leader showed more empowering leadership behaviours, both in the form of autonomy- and development support. Furthermore, psychological empowerment was found to partially mediate the relationship between autonomy support and work engagement, while self-goal-setting partially mediated the relationship between development support and work engagement. Thus, this study highlights how different empowering leader behaviours have the potential to create motivational states in the employees, making them become more engaged in their work on these days.

Keywords: *Diary study, empowering leadership, autonomy support, development support, work engagement, psychological empowerment, self-goal-setting*

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Sammendrag

Denne dagbokstudien bidrar til lederskaps litteraturen ved å undersøke den daglige effekten av empowermentbasert ledelse (autonomi- og utviklingsstøtte) på følgere sitt daglige nivå av arbeidsengasjement. I motsetning til tidligere forskning på området skiller denne studien mellom de ulike bidragene fra hver av dimensjonene av empowermentbasert ledelse. I tillegg ble det undersøkt *hvordan* og *hvorfor* hver av dimensjonene bidrar til arbeidsengasjement ved å inkludere en mediator variabel for hvert forhold. Studien er basert på data samlet inn i samarbeid med Sjøkrigsskolen. Samtidig som de reiste med seilskip fylte 87 kadetter ut et daglig spørreskjema over en periode på 30 dager. Som antatt viste flernivåanalyser at kadettene var mer engasjert i arbeidet sitt på de dagene hvor deres leder viste flere empowermentbaserte ledelsesatferder, både i form av autonomi- og utviklingsstøtte. Videre ble det funnet at psykologisk empowerment delvis medierte forholdet mellom autonomistøtte og arbeidsengasjement, mens selv-målsetting delvis medierte forholdet mellom utviklingsstøtte og arbeidsengasjement. Denne studien fremhever følgelig hvordan ulike empowermentbaserte ledelsesatferder har potensiale til å skape motivasjon hos ansatte, noe som gjør at de blir mer engasjert i arbeidet sitt på disse dagene.

Nøkkelord: *Dagbokstudie, empowermentbasert ledelse, autonomistøtte, utviklingsstøtte, arbeidsengasjement, psykologisk empowerment, selv-målsetting*

Preface

After a long and educational process filled with both laughter and tears, I am proud to finally present my master thesis for spring 2017. During this year, I have developed and improved my ability to work independently and gained a more complete insight into scientific processes. Despite the many challenges I have faced along the way, I feel great joy when reflecting on the knowledge I have gained and the experience that I bring along with me from this area of organizational psychology.

I would like to thank my guidance counselor, Olav Kjellevold Olsen. Despite your busy schedule, you have always made time for me. You have helped me remain calm in stressful situations, and together we've always managed to "find the next step". Thank you, Olav, for all your support and a collaboration that I would not have made it without.

Table of contents

Overview of the figures

Overview of the tables

Introduction

In order to be dominant in a global economy, organizations are forced to take an interest in more than mere profitability (Mendes & Stander, 2011, p. 1). To be successful, they need to focus on both health and performance (Conley, 2007). While performance is linked with productivity (Stahl, Zimmerer & Gulati, 1984), it has been argued that the main outcome of a healthy organization is the retention of talent (Davenport & Harris, 2007; Ulrich, Brockbank, Johnson, Sandholtz & Younger, 2008), which is crucial in order to avoid negative implications such as high economic costs and disrupted social and communicative structures (Bergiel, Nguyen, Clenney & Taylor, 2009). As a result, the past decade has witnessed a sharp increase in scientific studies on work engagement (Albrecht, in press; Bakker, Schaufeli, Leiter, & Taris, 2008), which is linked with both health and performance related outcomes (e.g., Schaufeli, Taris, & van Rhenen, 2008; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009; Bakker & Bal, 2010; Bakker, Demerouti, & Verbeke, 2004).

The concept of work engagement has been deemed pivotal to successful organizational performance (MacLeod & Clarke, 2009; Saks, 2006; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009). Yet, according to Jose and Mampilly (2015), a review of the available literature revealed a relative shortage of literature on the antecedents of work engagement. As they wrote, "it is the need of the hour to identify what exactly drives engagement" (Jose & Mampilly, 2015, p. 232).

The Job Demands-Resources model states that employee work engagement is dependent on the level of job demands and resources present. To be more specific, the model predicts that work engagement will increase in situations where the level of job demands and job resources are high (Bakker et al., 2008). Accordingly, a vital challenge in leadership may be to influence the level of demands and resources in order to facilitate subsequent work engagement. While there are several leadership styles with the potential to do this, the empowering leadership style in particular seems to thrive in this regard. Indeed, a few studies have already investigated empowering leadership as a potential predictor of engagement (Albrecht & Andreetta, 2011; Greco, Laschinger & Wong, 2006; Mendes & Stander, 2011; Tuckey et al., 2012). These studies reveal that leaders who empower their employees tends to have subordinates who are more engaged in their work. According to Tuckey and colleagues (2012), empowering leadership directly inspired employee engagement, optimized the working conditions for motivation by increasing the level of demands and resources and then strengthening the effect of such favorable working conditions. Despite these studies, there are still several important aspects of the relationship that has yet to be investigated.

First, previous studies on the topic have ignored the dynamic, short-term effects of leaders' behaviour, which may fluctuate from day-to-day and have different impact on follower outcomes,

depending on the day (Breevaart et al., 2014a, p. 139). In addition to this, work engagement has been known to vary greatly within persons (Xanthopoulou & Bakker, 2012), meaning that generally engaged employees may be more or less engaged on a specific day depending on the amount of resources available (Simbula, 2010; Tims, Bakker & Xanthopoulou, 2011). Such daily fluctuations and within-person differences are not captured by the more traditional designs, and has not yet been considered in the relationship between empowering leadership and work engagement.

Second, empowering leadership covers a wide range of behaviours and it remains largely unknown as to which of these behaviours are related to employee engagement. To elaborate, Amundsen and Martinsen (2014) developed and validated a meaningful two-dimensional measure that captures core practices that empowering leaders apply towards subordinates. They argue that empowering leaders mainly influence their subordinates through autonomy support and development support (Amundsen & Martinsen, 2014). However, we do not know which of these dimensions are related to engagement, nor to what extent.

Third, and this is related to the second, no previous studies have investigated how and why the dimensions of empowering leadership may be related to work engagement. This is problematic for the concept of empowering leadership as it opens itself to the very same critiques that Knippenberg and Sitkin (2013) pointed out for the concept of transformational leadership. They argue that the current perspectives on transformational leadership fails to specify how each dimension has a distinct influence on mediating processes and outcomes, or, conversely, it remains unexplained how these are distinct dimensions that yet all operate through the same mediating processes, contingent on the same moderating factors (Knippenberg & Sitkin, 2013, p. 2). Said in another way, in order for a multidimensional mediation model to make theoretical sense, it must include theory that explains the role of each individual element and the mediation processes by which each affects outcomes (Knippenberg & Sitkin, 2013, p. 16). Such criticism applies to the concept of empowering leadership as well. No research has investigated the influence of autonomy support and development support on mediating processes and outcomes.

The current study intends to address the first shortcoming by adopting a daily diary study design, which captures daily fluctuations in the variables under study. The second and third shortcoming will be addressed by investigating whether the two dimensions of empowering leadership have distinct influences on work engagement and whether they have distinct influences on mediating processes in these relationships. Previous research has shown that psychological empowerment and self-leadership strategies tends to have mediating effects in the literature (Albrecht & Andreetta, 2011; Avolio, Zhu, Koh, & Bhatia, 2004; Carless,2004; Dewettinck & van

Ameijde, 2011; Gregory, Albritton, & Osmonbekov, 2010; Amundsen & Martinsen, 2015; Seibert, Silver, & Randolph, 2004). Amundsen and Martinsen (2015) went a step further and claimed that psychological empowerment and self-leadership mediates the effects of empowering leadership on subordinate outcomes. In addition, both variables have been shown to facilitate work engagement (Jose & Mampilly, 2015; Breevaart, Bakker, Demerouti & Derks, 2016; Park et al, 2016). Thus, the current study will test, as outlined in figure 1 below, whether psychological empowerment is a mediator between autonomy support and work engagement. Self-goal-setting, being one of several strategies within the self-leadership concept, is hypothesized to mediate the relationship between development support and work engagement.

By doing so, this study may give a contribution to the literature as the first to develop and test a theoretical model explaining the underlying mechanisms of the relationship between empowering leadership and work engagement on a daily basis.

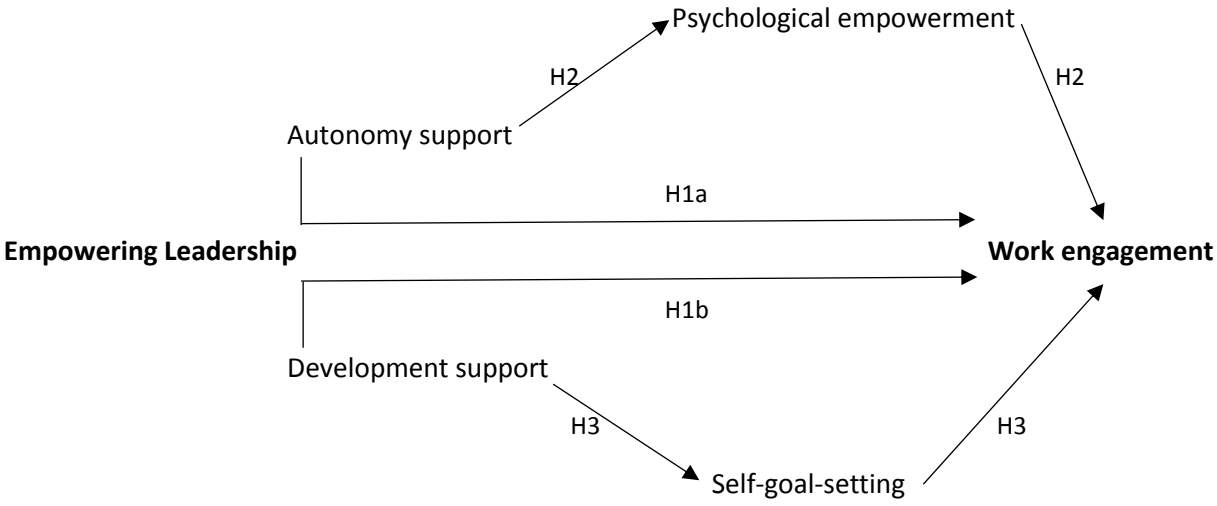

Figure 1. An integrated model for the hypothesized relationships.

The challenge of encompassing dynamic variables in studies of leadership and work engagement

Cross-sectional study designs are certainly the most common method used in work and organizational psychology (Ohly, Sonnentag, Niessen & Zapf, 2010). This implies that the variables have been measured at one point in time, and that conclusions are made on the basis of relatively stable constructs. This approach, however, has several weaknesses. While the cross-sectional method is appropriate when measuring stable traits, it ignores the impact of variables that are dynamic in their nature, like emotions or motivation. For instance, people with several admirable

traits will still experience bad days from time to time. Thus, dynamic variables need to be measured differently than the more stable variables.

The current study will address this issue by adopting a daily diary study design that spans over 30 days. With this design, variables are measured every day in order to capture daily fluctuations and thereby creating a more realistic and accurate description of the phenomenon under study. Adopting this method makes the current study unique, as it becomes the first study to investigate within-person differences in the relationship between empowering leadership and work engagement.

Taking such an approach is important for several reasons. According to the homological views in theoretical modeling, constructs are expected to operate similarly across levels of analysis (Kozlowski & Klein, 2000). Since support for the relationship has been found at the between-person level (Albrecht & Andreetta, 2011; Greco et al., 2006; Mendes & Stander, 2011; Tuckey et al., 2012,), finding support at the within-person level will add to the parsimony and breadth of theories in this relationship. If analysis at the within-person level fails to support the relationship, homology is rejected which sets boundaries and indicates the need for theory refinement (Chen, Bliese & Mathieu, 2005). In addition, measuring variables at a daily basis will reduce recall bias and allows for the investigation of leadership in its natural context (Breevaart et al., 2014a).

Theoretical Framework

In the following section, the concept of work engagement, empowering leadership, psychological empowerment and self-leadership will be explained. In addition, hypotheses are developed and presented based on a combination of theory and previous research.

Work engagement

The concept of work engagement has recently gained increased attention among scholars. A search for "Work engagement" in PsychINFO, the leading database of academic publications in psychology, yielded 1353 hits, with almost all articles being published after the turn of the century. This is not surprising, as the information and service economy of the 21st century requires employees who are willing and able to invest themselves fully in their roles in order to compete effectively (Breevaart, Bakker, Demerouti & Hetland, 2012, p. 305). This is because engaged employees are able to direct all their effort and energy into their work, which enables them to perform their work at high levels of both quality and quantity (Breevaart et al., 2016). In addition, it has been argued that engaging employees is the key to ensuring their overall wellness (Mendes & Stander, 2011). In other

words, fostering work engagement is beneficial, both for the individual employee and for the organization.

Engaged employees are characterized as highly energetic and self-efficacious individuals with a positive attitude (Bakker et al., 2011). They are aware of the organizational context and work with others to improve performance within their roles for the benefit of the organization (Devi, 2009). Even though these individuals may feel tired after a long day of hard work, they describe their tiredness as a rather pleasant state as it is associated with positive accomplishments (Bakker et al., 2011). To them, working is fun.

Most scholars define work engagement as a positive and fulfilling work-related state of mind, characterized by vigor, dedication and absorption (Schaufeli & Bakker, 2004, 2010). The concept captures how workers experience their work. The *vigor* component refers to high levels of energy and mental resilience while working. Thus, an employee who feels great vigor at work is highly motivated by the job and is likely to remain very persistent when encountering difficulties (Mauno, Kinnunen & Ruokolainen, 2007). *Dedication* means being enthusiastic about work and inspired by the work tasks. A dedicated employee is therefore characterized by a strong psychological involvement in one's work (Mauno et al., 2007). *Absorption*, being the last component, is characterized by being fully concentrated and happily engrossed in one's work and having the feeling that time flies (Schaufeli & Bakker, 2004, 2010). Some scholars have argued that this component is similar to the concept of flow (e.g., Gonzales-Roma, Schaufeli, Bakker & Lloret, 2006; Langelaan, Bakker, van Doornen & Schaufeli, 2006 and Llorens, Bakker, Schaufeli & Salanova, 2007). Flow refers to a state of mind in which people are so intensively involved in an activity that nothing else seems to matter (Mauno et al., 2007). A distinction can be made, however, in which flow is a short-term peak experience that may occur in any domain of life, whereas absorption is a more persistent state of mind which takes place specifically in the work domain (Hallberg & Schaufeli, 2006; Schaufeli, Bakker & Salanova, 2006).

Even though this definition explicitly says that work engagement is a work-related state, the majority of previous studies have treated it as a relatively stable (trait-like) variable across time (Bakker, 2009; Macey & Schneider, 2008). However, individuals are not equally engaged at work across all days. There are indeed days on which employees feel more vigorous, dedicated and absorbed than on other days (Bakker et al., 2011). Recent diary studies have shown that 30-40% of the variance in work engagement is explained within persons over the working week (Sonnentag, 2003; Xanthopoulou et al., 2009). Assessing the general level of work engagement therefore ignores the dynamic and configurational part of the phenomenon (Sonnentag, Dormann & Demerouti, 2010).

Thus, the current study views work engagement as a state rather than a trait. In this view, work engagement, or state work engagement, is defined as a transient, positive, fulfilling and work-related state of mind that fluctuates within individuals over a short period of time (Sonnentag et al., 2010), and is characterized by by vigor, dedication and absorption (Breevaart et al, 2012; Schaufeli & Bakker, 2004).

Stimulating work engagement can make a true difference for employees and may offer organizations a competitive advantage (Bakker et al., 2008, p. 188). The importance of engagement is certainly evident in the literature as it is positively associated with, among others, job satisfaction, organizational commitment, organizational citizenship behaviour, performance and psychological well-being (Bakker & Demerouti, 2008; Koyuncu, Burke, & Fiksenbaum, 2006; Medhurst & Albrecht, 2011; Saks, 2006; Schaufeli & Bakker, 2004). In addition, it has been found negative correlations between work engagement and psychosomatic health complaints (e.g., chest pain and headaches), anxiety, depression, turnover intention and burnout (Demerouti et al., 2001; Hakanen, Bakker & Schaufeli, 2006; Shuck, Reio & Rocco, 2011).

Despite its importance, Blessing White's 2011 report indicated that, out of the 10,914 workers surveyed, only 31% are engaged. Such a discovery suggests that we do not know enough about the drivers of work engagement and that organizations are not investing enough effort to engage their employees. Indeed, "only very few interventions to improve work engagement exist and have been tested" (Schaufeli&Salanova, in press). The current study presents a way for organizations to facilitate work engagement by addressing the role of management. In this way, the study may support previous discoveries of leadership as an antecedent of work engagement and provide new knowledge about the underlying mechanisms in the relationship.

Empowering leadership

It has become a practical imperative for leaders to engage in empowering initiatives that involve their employees, as it is neither feasible nor realistic for leaders "to have all the answers" or "make all the decisions" (Lovelace, Manz, & Alves, 2007, p. 375). In addition, it has been shown that employees who are given greater opportunities for self-direction will manifest superior outcomes (Vecchio, Justin & Pearce, 2010).

At its core, empowerment involves enhanced individual motivation at work through the delegation of responsibility and authority to the lowest organizational level where a competent decision can be made (Conger & Kanungo, 1988; Thomas & Velthouse, 1990). In other words, empowering leaders give influence to their employees, rather than having influence over them (Amundsen & Martinsen, 2014). In this way, empowering leadership represents a fundamental shift

of power down the hierarchy to subordinates with high levels of appropriate knowledge and skills (Amundsen & Martinsen, 2015).

The current study follows Amundsen and Martinsen (2014) and their definition of empowering leadership as "the process of influencing subordinates through power sharing, motivation support and development support with intent to promote their experience of self-reliance, motivation and capability to work autonomously within the boundaries of overall organizational goals and strategies". This definition presents three separate dimensions of empowering leadership, namely power sharing, motivation support and development support. In the same article, however, Amundsen and Martinsen (2014) only found support for a theoretical meaningful two-dimensional construct of empowering leadership, and defined a new dimension, autonomy support, which encompass the dimensions of power sharing and motivational support, whereas development support was found to be a statistically distinct dimension (p. 505-506). Thus, empowering leadership is defined as "the process of influencing subordinates through autonomy support and development support with intent to promote their experience of self-reliance, motivation and capability to work autonomously within the boundaries of overall organizational goals and strategies". In the following, both dimensions of empowering leadership, and their associated behaviours, will be presented.

The autonomy support dimension of empowering leadership consists of behaviours that either share power with, or motivates the employee (Amundsen & Martinsen, 2014). From a theoretical perspective, these behaviours provide the individual employee with autonomy and motivation in performing autonomous work-role activities (Amundsen & Martinsen, 2014).

Power sharing is an important prerequisite for employees to experience high levels of autonomy (Burke, 1986). It is a distinct reference to the leader's delegation of formal authority to subordinates, such that they can make autonomous decisions (Amundsen & Martinsen, 2014, p. 489). In this way, employees are not just participating in the decision making, they have been given authority and responsibility to make decisions themselves. However, according to Vroom and Yetton (1973), unless a leader and subordinate share the same task objectives, delegation is unlikely to be effective. Thus, a leader should also coordinate goals at different levels in order to empower subordinates more effectively. According to Amundsen and Martinsen (2014), such coordination also implies sharing of other work related information, which in itself may be empowering (Kanter, 1977). For these reasons, Amundsen and Martinsen (2014) included coordination and information sharing as important behaviours to complement delegation under the category of power sharing.

Motivation support is a set of leader behaviours aimed at promoting employees' motivation to work autonomously (Amundsen & Martinsen, 2014). As Thomas and Velthouse (1990) pointed out, the word "power" in empowerment may have several meanings. They argue that "to empower" is not only about the delegation of formal power, but may also mean "to energize" or "to give energy". This notion is important, as it is not sufficient to provide employees with increased autonomy, they also have to be motivated to work autonomously (Amundsen & Martinsen, 2014, p. 488). According to Amundsen and Martinsen (2014), an empowering leader may provide such motivation by encouraging personal initiative and goal focus, supporting efficacy and creating a climate where employees feel inspired.

Development support is the second dimension of empowering leadership and includes behaviours that influence employees' continuous learning and development (Amundsen & Martinsen, 2014). One way an empowering leader may facilitate learning and development is through role modeling. Model learning is a component in social cognitive theory which states that a person's cognitive processes, behaviours and environmental influences may all be related (Bandura, 1986). This implies that behaviour may be learned or modified by observing others (Sims & Lorenzi, 1992).

Another way in which an empowering leader stimulates learning and development is through guidance (Amundsen & Martinsen, 2014). In this context, leaders may guide their employees from dependence upon the leader to independent self-leadership (Manz & Sims, 2001). The process of giving guidance may take several forms, such as teaching or coaching the individual subordinate (Amundsen & Martinsen, 2014), and is aimed at facilitating learning and mastery. This is important, as the benefits of having high levels of autonomy and the motivation to work autonomously are limited if the individual lacks the appropriate knowledge and skills to handle the new responsibilities (Amundsen & Martinsen, 2014).

In sum, the empowering leader provides autonomy, motivation to work autonomously and develop knowledge and skills in their subordinates. A potential outcome of these behaviours, for the individual employee, is increased engagement at work.

The Job Demands-Resources Model - bridging the leadership vs. work engagement relationship

A theory that previously has been applied in studies of work engagement is the job demands-resources model (Bakker & Demerouti, 2007). The model assumes that every workplace consists of various job demands and job resources which may lead to either job strain or motivation in the form of work engagement (Bakker & Demerouti, 2007). Job demands are those physical, psychological, social or organizational aspects of the job that require sustained physical and/or psychological effort

or skills and are therefore associated with certain physiological and/or psychological costs (Bakker & Demerouti, 2007, p. 312). Job resources, on the other hand, are those physical, psychological, social or organizational aspects of the job that are either functional in achieving work goals, reduce job demands and the associated costs or stimulating personal growth, learning and development (Bakker & Demerouti, 2007, p. 312). Xanthopoulou, Bakker, Demerouti and Schaufeli (2009) further expanded the model by integrating personal resources, which refers to the positive self-evaluations that are linked to resiliency and refer to individuals' sense of their ability to control and impact upon their environment successfully (Hobfoll, Johnson, Ennis, & Jackson, 2003).

The model assumes that job and personal resources activate a motivational process whereby perceived resources that are instrumental in achieving work goals can also foster employee's growth, learning and development; satisfy need for autonomy and competence; and increase willingness to dedicate one's efforts and abilities to the work task (Crawford, LePine & Rich, 2010). These perceptions and beliefs increase the degree to which individuals are willing to invest their selves into their role performances (Crawford et al., 2010, p 836). As such, the model assumes a positive relationship between resources and engagement.

The model also suggest that job demands may compliment resources in facilitating subsequent work engagement. Initially, job demands are assumed to activate an energy depletion process whereby an employee's sustained increases in effort to meet perceived job demands are met with an increase in compensatory psychological and physiological costs that drain the employee's energy (Crawford et al., 2010, p. 836). However, if employees have resources available to them, they should be more willing to invest themselves in response to demands. Because job resources are functional in achieving work goals, and personal resources refer to a sense of ability to control and impact upon the environment successfully, having resources available should help employees feel more confident and secure that expending their effort will allow them to successfully meet the demands. In this way, the demands are perceived as challenges with the opportunities to learn, achieve and demonstrate the type of competence that tends to get rewarded (Crawford et al., 2010). This is in line with Macey and Schneider's (2008) view that demands promote engagement when employees trust their investment of time and energy will be rewarded in some meaningful way.

According to the model then, both job -and personal resources will lead to work engagement, especially in situations where job-demands are high (Bakker & Demerouti, 2007). Thus, the model implies that if the empowering leader's behaviours are functional in achieving goals or stimulating personal growth, learning and development, then these behaviours should also function

as job resources in promoting subsequent work engagement. The following section will address this process more closely by considering previous research as well as accounting for daily fluctuations.

Autonomy support, development support and work engagement

The role of the leader in fostering work engagement has received limited research attention (Bakker, Albrecht & Leiter, 2011, p. 13). Recently however, a handful of studies have surfaced, showing that leaders have the potential to influence employee engagement (Breevaart et al. 2014a; Jose & Mampilly, 2015; Mendes & Stander, 2011; Tims et al. 2011; Breevaart et al. 2016; Tuckey et al. 2012). Among these studies, most have focused on a transformational leadership style. Only four articles were found on the relationship between empowering leadership and work engagement (Albrecht & Andreetta, 2011; Greco et al., 2006; Mendes & Stander, 2011; Tuckey et al. 2012). These articles showed that leaders who empower their employees also have subordinates with a higher level of work engagement. However, these studies were all cross-sectional in design, and thus failing to control for state variances at the within-person level. In addition, neither of these studies investigated the separate contributions of each dimension of empowering leadership.

According to Tuckey and colleagues (2012), empowering leadership can play an intrinsic and an extrinsic motivational role to stimulate work engagement (p. 17). They argue empowering leadership behaviours should enhance followers' capacity for self-determination and feelings of mastery, and thus contribute to intrinsic motivation. Extrinsically, the outcome of a heightened sense of mastery and self-determination is enhanced motivation for task accomplishments (Conger & Kanungo, 1988). Thus, they hypothesized that empowering leadership should directly promote work engagement through intrinsic and extrinsic motivational processes (Tuckey et al. 2012).

As mentioned in the previous section, the Job Demands-Resources model outlines how work engagement arises through a motivational pathway whereby adequate levels of job and personal resources promote the channeling of energy into work tasks (Tuckey et al. 2012, p. 16). A number of studies have supported the model by showing that job resources boost work engagement particularly when job demands are high (Bakker, Hakanen, Demerouti, & Xanthopoulou, 2007; Hakanen, Bakker, & Demerouti, 2005). This is interesting for the concept of empowering leadership, as both autonomy support and development support may be considered job resources by definition, as these behaviours are likely to be functional in achieving work goals (i.e., more decision latitude) or stimulating personal growth, learning and development (i.e., receiving coaching) (Bakker & Demerouti, 2007). Tuckey and colleagues (2012) showed that empowering leaders place additional demands on followers. At the same time, however, they showed that empowering leaders equip their followers with the resources necessary to deal with these additional demands. For instance,

autonomy supportive behaviours such as participative decision making, and development supportive behaviours such as coaching toward better problem solving, should provide more leverage – in the form of self-determination and control – for followers to utilize the available resources to deal with job demands (Tuckey et al., 2012, p. 18).

On a daily basis, this means employees are more engaged in their work on days when they have more job resources available to them (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009; Xanthopoulou, Bakker, Heuven, Demerouti, & Schaufeli, 2008). In other words, on days when the leader exercise more autonomy- or development supportive behaviours, subordinates are likely to perceive having more available job resources and thereby become more engaged in their work on these days. Research have also shown that job demands are positively related to state work engagement (Bakker, van Emmerik, Geurts, & Demerouti, 2008), while they drain energy in the long term and are therefore negatively associated with trait-like work engagement (Breevaart et al., 2012, p. 306). On the basis of these findings and in line with the job demands-resources model, it seems likely that daily empowering leader behaviours, in the form of either autonomy- or development support, will increase the daily level of demands and resources for the employees and thereby facilitate daily work engagement.

To my knowledge, no other studies have investigated the relationship between daily empowering leadership and state work engagement. This is important, as the antecedents of trait and state work engagement appear to be different (Breevaart et al., 2012, p. 306). To elaborate, although empowering leadership has been shown to predict trait-like work engagement (Greco et al., 2006; Mendes & Stander, 2011; Tuckey et al., 2012), it is unknown whether this is the case on a daily basis. However, a few studies have been conducted on the effect of daily transformational leadership on state work engagement (Breevaart et al., 2014a; Breevaart et al., 2016; Tims et al., 2011). These studies revealed that employees were more engaged in their work on days when leaders used more transformational leadership behaviours, because the environment was perceived to be more resourceful on these days (Breevaart et al., 2016, p. 311). Since an empowering leadership style also influences the resourcefulness of the work environment (Tuckey et al., 2012), it is likely that daily empowering leader behaviours in the form of autonomy support and development support will contribute to higher levels of state work engagement.

Based on the aforementioned arguments, theory and research findings, the following hypotheses are formulated:

Hypothesis 1a: Daily autonomy supportive behaviours are positively related to employees' daily level of work engagement.

Hypothesis 1b: Daily development supportive behaviours are positively related to employees' daily level of work engagement.

Even if these hypotheses hold true, the question still remains as to how the variables are related. As Avolio, Zhu, Koh and Bhatia (2004) put it, "the mechanisms and processes by which… leaders exert their influence on their follower's motivation and performance have not been adequately addressed in the literature" (p. 951). Although this phrase may be somewhat outdated, the amount of mediator articles published the last couple of years indicate that this is still a challenge. As such, the current study intends to go further by investigating the "how's" and "why's" of the proposed relationships.

The quest for mediators

So far it has been suggested that the balance between demands and resources is important for work engagement, and that the leader has the potential to strengthen this connection in a favorable way. Yet to be addressed, however, is the mechanisms underlying the relationship. In other words, although there has been proposed a link between the dimensions of empowering leadership and work engagement, the question still remains as to how and why these relationships work.

Uncovering mediators provides an answer to this, by providing substantive interpretations of the underlying mechanisms in a given relationship (Amundsen & Martinsen, 2015). For example, there is a positive association between empowerment climate and job satisfaction, because an empowerment climate leads to feelings of psychological empowerment, which in turn facilitates job satisfaction (Seibert, Silver & Randolph, 2004). This implies that if an empowerment climate did not lead to psychological empowerment, there would have been no association between empowerment climate and job satisfaction.

Since empowering leadership consists of several different behaviours, grouped in two separate dimensions, it becomes important to specify how and why each dimension relates to specific outcomes. This can be accomplished by uncovering mediator variables for each dimension in the relationship under study. The following section is only intended to present two potential mediators and briefly explain why they may be relevant in the proposed relationships. In other words, this section is intended to justify the choice of mediators. The actual hypothesis for each mediator is not presented until the end of the next two sections.

In their theoretical discussion of empowering leadership, Amundsen and Martinsen (2015) suggested that psychological empowerment and self-leadership may be regarded as important empowering characteristics, stating that:

"Together with empowering leadership, psychological empowerment and self-leadership are inseparably tied to the empowering concept itself and represent necessary "be and do" characteristics respectively of empowered employees that mediate the effect of empowering leadership on subordinate outcomes" (p. 305).

Drawing from this citation, both psychological empowerment and self-leadership are viewed as employees' reactions to empowering leader behaviours, with the potential to affect outcomes such as work engagement.

Psychological empowerment has been defined as intrinsic motivation manifested in four cognitions: meaning, competence, self-determination and impact (Thomas & Velthouse, 1990). These cognitions reflect the individual's orientation to his or her work role (Spreitzer, 1995). Since the concept revolves around employees' sense of ability to control and impact upon the environment, it may by definition be regarded as a personal resource (Hobfoll et al., 2003). Xanthopoulo and colleagues (2007) empirically showed that job resources breed personal resources and in turn enhance engagement. Accordingly, it is therefore likely that empowering leadership behaviours, perceived as job resources, will lead to increased feelings of psychological empowerment, a personal resource, and in turn enhance work engagement.

After reviewing the literature, Jose and Mampilly (2015) found an association between all four components of psychological empowerment and work engagement. In the same article, they also showed that psychological empowerment fully mediated the relationship between perceived supervisor support and work engagement (Jose & Mampilly, 2015). Thus, empirical findings suggest that psychological empowerment may mediate the relationship between empowering leadership and work engagement.

Self-leadership is viewed as a set of strategies and skills that individuals use to influence themselves toward higher levels of performance and effectiveness (Manz & Sims, 1989). The concept consists of three distinct, but complimentary strategies: behaviour focused, natural reward and constructive thought pattern strategies (Manz & Sims, 2001). Behaviour focused strategies consists of self-observation, self-goal setting, self-reward and self-correcting feedback (Manz & Neck, 2004). Natural reward strategies revolve around the discovery and focus on the enjoyable and intrinsic motivating aspects of the task at hand, and to seek activities that provide pleasure (Houghton & Neck, 2002; Manz, 1986). Finally, the constructive thought pattern strategies include positive self-talk, raising the consciousness about beliefs and assumptions to change dysfunctional thinking and visualizing successful performance (Houghton & Neck, 2002). Through these strategies, people control their own actions and thinking to reach personal and organizational goals (Manz & Sims, 2001; Neck & Manz, 2010; Prussia, Anderson & Manz, 1998).

Early definitions of empowering leadership stated that the leader's role is to "lead others to lead themselves" (Manz & Sims, 2001). Indeed, studies have revealed a positive relationship between empowering leadership and subordinate self-leadership (Amundsen & Martinsen, 2014, 2015; Tekleab, Sims, Yun, Tesluk & Cox, 2008; Yun, Cox & Sims, 2006). In addition, self-leadership has also been shown to predict subordinate work engagement. For instance, Breevart and colleagues (2016) showed that employees were more engaged in their work when they used more self-leadership strategies. Park and colleagues (2016) further supported this by showing a significant effect from self-leadership on work engagement. These empirical findings indicate that self-leadership has the potential to mediate the relationship between empowering leadership and work engagement.

However, a potential disadvantage of including the self-leadership concept as a mediator is that it consists of several different strategies. If these strategies are not studied separately, it is impossible to derive which specific strategies are in fact contributing to the mediation effect, nor can anything be concluded about the extent to which each strategy explains the relationship. It is even possible that some of the strategies have a negative impact on the mediation. For instance, Breevaart and colleagues (2014b) found that only three of the five dimensions of self-leadership loaded significantly on the factor self-management, and that these three dimensions were the only ones related to job resources. To be more specific, self-goal-setting, self-observation and self-cuing loaded significantly on the factor self-management and were positively related to job resources, whereas self-reward and self-punishment were unrelated. In addition, since the strategies of self-leadership are relatively different in their nature, studying them separately may yield more insight and increase the overall knowledge of the self-leadership concept as a whole. As such, the current study will focus solely on the self-goal-setting strategy of self-leadership, leaving the remaining strategies to future research.

Self-goal-setting was chosen for the current study, largely based on its theoretical ability to facilitate work engagement and because it is a strategy that is trainable. Since goal setting may be regarded as a strategy, its role in the relationship under study is illustrated in the Personal resources adaptation model (Heuvel, Demerouti, Schaufeli & Bakker, 2010). According to the model, job resources indirectly affects coping strategy through personal resources (Heuvel et al., 2010; Xanthopoulo et al., 2007) which ultimately enhances work engagement (Bakker & Demerouti, 2008; Heuvel et al., 2010). Thus, empowering leadership behaviours (being regarded as job resources) may stimulate self-goal-setting behaviour in the cadets and in turn facilitate work engagement.

At last, referring to Knippenberg and Sitkin's (2013) critique against transformational leadership, the question regarding each dimension's separate contribution towards outcomes has

yet to be addressed. The following two sections intends to address this issue by clarifying how each dimension of empowering leadership has a distinct influence on the mediators, and thereby explaining how each dimension may contribute to work engagement through separate influence processes. A mediation hypothesis is presented at the end of both sections.

Autonomy support, psychological empowerment and work engagement

In order for a subordinate to be psychologically empowered, he or she has to experience intrinsic motivation through feelings of meaning, competence, self-determination and/or impact (Thomas & Velthouse, 1990). Within the autonomy support dimension of empowering leadership are several behaviours with the potential to stimulate these feelings, which in turn should facilitate work engagement.

The cognition of meaning concerns a sense of feeling that one's work is personally important (Zhang & Bartol, 2010, p. 110). One of the specific behaviours that an empowering leader utilizes to influence a subordinate is information sharing (Amundsen & Martinsen, 2014). To be more specific, an empowering leader can enhance the meaningfulness of work by providing information about the overall goals and mission (Conger & Kanungo, 1988). The leader may also provide information to help an employee understand the importance of one's contribution not only to the unit but also to the organization, and thereby creating a stronger sense of meaning (Baek-Kyoo, Doo & Sewon, 2016). May, Gilson and Harter (2004) noted that meaningfulness in work fosters employees' motivation and attachment to work, and thereby resulting in work engagement.

The cognition of competence refers to self-efficacy, or belief in one's ability to successfully perform tasks (Zhang & Bartol, 2010, p. 110). An empowering leader supports follower efficacy by listening to their subordinates' opinions, ideas and suggestions which may contribute to a feeling of being considered and taken into account, which may have implications for efficacy (Deci, Conell & Ryan, 1989). In addition to this, an empowering leader should be familiar with their subordinates' capabilities and encourage the use of their competences, which in turn may contribute to the development of their self-efficacy beliefs (Amundsen & Martinsen, 2014). The empowering leader should also show interest, confidence and trust and thereby enhancing subordinates' positive thought pattern and self-efficacy beliefs (Amundsen & Martinsen, 2014). In relation to work engagement, Maslach, Schaufeli and Leiter (2001) found it to be strongly correlated with self-efficacy.

The cognition of self-determination indicates perceptions of freedom to choose how to initiate and carry out tasks (Zhang & Bartol, 2010, p. 110). The empowering leader may stimulate this cognition by delegating authority, which involves the leader giving freedom to the subordinate, so

that he or she may choose how to initiate and carry out tasks (Amundsen & Martinsen, 2014). When a subordinate is given such formal freedom, it is reasonable to expect that the subordinate's perception of freedom is affected, and thereby creating feelings of self-determination. Indeed, research supports this, asserting that "empowering leaders provide employees with feelings of self-determination by encouraging the individual to decide how to carry out their jobs and removing bureaucratic constraints" (Baek-Kyoo et al., 2016, p. 1074). According to the Job demands-resources model, providing such autonomy will start a motivation process that leads to work engagement (Bakker & Demerouti, 2008).

Finally, the cognition of impact represents the degree to which one views one's behaviours as making a difference in work outcomes (Zhang & Bartol, 2010, p. 110). Amundsen and Martinsen (2015) argued that an empowering leader promotes subordinates' participation in decision making and provides efficacy support, which may give rise to feelings of having an impact (p. 307). Said in another way, if employees feel that their ideas are respected and valued in a decision-making process, they will have a strong sense of control over the immediate work situation and their sense of impact will be heightened (Baek-Kyoo et al., 2016, p. 1074). Although there is less evidence to support the association between impact and engagement (Albrecht & Andreetta, 2011), Stander and Rothmann (2010) argued that individuals' belief that their actions are making a difference in their organization will contribute to work engagement.

In sum, it appears that the behaviours in the autonomy support dimension have the potential to affect all four cognitions of psychological empowerment, and that each of these four cognitions in turn may contribute to work engagement.

The link between the autonomy support dimension and psychological empowerment may also be theoretically meaningful. According to the Self-determination theory, individuals will experience intrinsic motivation when they have satisfied the need for autonomy, competence and relatedness (Deci & Ryan, 2000). Following the previous arguments, then, it is likely that subordinates will experience intrinsic motivation as a reaction to their leader's power sharing and motivational supportive behaviours, as these may satisfy the need for autonomy (self-determination) and competence.

Another theory that lends support to the proposed relationship is Lachinger's extended version of Kanter's structural empowerment theory (1977, 1993), which includes Spreitzer's (1995) notion of psychological empowerment (Laschinger, Gilbert, Smith & Leslie, 2010). Here, structural empowerment is the perception of the presence or absence of empowering conditions in the workplace (Laschinger, Finegan & Wilk, 2009). Job characteristics which offer employees greater

autonomy and control over their jobs are emphasized as important empowering conditions (Leach, Wall & Jackson, 2003). Thus, an empowering leader's support for autonomy may be regarded as a form of structural empowerment. In the extended version, psychological empowerment is conveyed as the mechanism through which structural empowerment affects employees' work attitudes and behaviours (Lachinger et al., 2010). In other words, psychological empowerment is employee's reactions to structural empowerment conditions (Laschinger et al., 2009). Since an empowering leader's autonomy supportive behaviours are regarded as a form of structural empowerment, it should stimulate feelings of psychological empowerment in the employees and thereby affect their work attitudes and behaviours.

Based on the aforementioned arguments, theory and research findings, the following hypothesis is formulated:

Hypothesis 2: Psychological empowerment will mediate the relationship between daily empowering leadership behaviours, in the form of autonomy support, and employees' daily level of work engagement.

Development support, self-goal-setting and work engagement

Several scholars have pointed out that the primary aim of empowering leadership is to lead others to lead themselves (Dewettinck & van Ameijde, 2011; Manz & Sims, 2001). Despite this, only a few studies have investigated the relationship between empowering leadership and subordinate self-leadership (e.g., Amundsen & Martinsen, 2014; Tekleab et al., 2008; Yun et al., 2006). Although these studies found support for a positive relationship between the two variables, none have looked at which of the empowering leader behaviours that facilitate subsequent self-leadership. Nor have any of the studies investigated which of the self-leadership strategies are more or less affected by the empowering leader's behaviours. An important notion to highlight here is that self-leadership is not a stable characteristic. Instead, as several scholars have pointed out, self-leadership is a set of strategies that can be taught and learned (Frayne & Latham, 1987; Latham & Frayne, 1989; Manz & Sims, 2001). This automatically implies that self-goal-setting, being one of these strategies, may also be taught and learned. Thus, if the leader is an efficient self-goal-setter, he or she may teach this strategy to the subordinates.

Modeling and guidance are the two behaviours within the development support dimension that an empowering leader utilizes to influence subordinates' continuous learning and development (Amundsen & Martinsen, 2014). Through modeling, the empowering leader displays daily behaviours that are observable by the subordinate and thereby creates daily opportunities for observational learning and behavioral modification. According to Sims and Lorenzi (1992), observational learning is

more likely to be effective when the person being observed is perceived to have status, power, success and/or competence. Thus, observational learning should be more effective when observing a leader as opposed to observing a coworker. In addition, empowering leaders are known to be effective self-leaders (Manz & Sims, 1991, 2001), and by repeatedly displaying or modeling such behaviours to their employees, it is likely that the subordinates will learn and develop self-leadership skills. Said in another way, the empowering leadership approach advocates the modeling of self-leadership behaviours for the purpose of facilitating subsequent adoption of these self-leadership strategies by the follower (Manz & Sims, 2001; Pearce & Sims, 2002). By doing this, employees will adopt the standards that they observe in the leader and then evaluate their own performance according to those standards (Manz & Sims, 2001, p. 61). In regards to the self-goal-setting strategy, leaders who "stretch" themselves with challenging self-set goals are likely to evoke the same sort of achievement oriented behaviour in their followers, making them set their own challenging goals. (Manz & Sims, 2001, p. 61). Since self-goal-setting is a behaviour focused strategy (Manz & Neck, 2004) it should be easier for the leader to model, and for the employees to observe, as oppose to the constructive thought pattern strategies that are more cognitively focused.

In addition to modeling, empowering leaders may guide their subordinates from dependence upon the leader to independent self-leadership (Manz & Sims, 2001) by coaching and teaching them. According to Manz & Sims (2001), providing guidance is especially important in the beginning of an employee's career with an organization. They argue that new employees are unfamiliar with the objectives, tasks and procedures of their positions, and they are not likely to have an adequate set of self-leadership skills (Manz & Sims, 2001, p. 60). Manz & Sims (2001) believes that only a minority of individuals in our society has had the natural opportunity to fully develop their own self-leadership, as institutions such as schools, family and military service inadvertently promote and encourage dependence rather than independence (p. 60). As a result, individuals learn to become accustomed to authority figures making decisions and assigning goals (Manz & Sims, 2001). This may be especially true in the current study, as the data is gathered from individuals in the military service on a voyage across the Atlantic, which is likely to be a completely new and unfamiliar context for most of the cadets. For these reasons, it is important that the leader provides guidance by giving constructive suggestions, instruction and coaching in order to develop self-leadership skills in their employees (Manz & Sims, 2001).

By providing guidance, the empowering leader may also facilitate self-goal-setting in their employees. A leader can provide such guidance by asking questions that foster this kind of behaviour (Manz & Sims, 2001). For instance, the leader can facilitate self-goal-setting behaviour in the cadets by asking questions such as "When do you want to have it finished?" and "How many will you go

for?" (Manz & Sims, 2001). By doing this, the empowering leader teaches the cadets to continually think about and develop their own self-set goals (Manz & Sims, 2001).

The process of giving guidance may be somewhat controversial, however. According to Morgeson (2005), hands-on coaching by external leaders may hinder long-term self-leadership by creating dependence on the leader. On the contrary, I follow Amundsen & Martinsen (2014) and argue that the guidance process of an empowering leader involves coaching and teaching employees how to utilize self-leadership strategies in order to empower them and thereby making them less dependent on the leader.

In sum, it seems likely that the behaviours in the development support dimension of empowering leadership have the potential to facilitate subordinate self-goal-setting.

While the literature reveals a positive relationship between self-leadership and work engagement (Breevaart et al., 2016; Park et al., 2016), a potential issue is that neither of these studies examined the separate effects of each self-leadership strategy on work engagement. This means that we cannot infer an effect from self-goal-setting on engagement on the basis of these studies. However, Bloom, Kinnunen and Korpela (2015) found a positive correlation between self-goal-setting and work engagement. This finding may be further supported by theory. According to Latham, Mitchell and Dosett (1978), the standard or difficulty of self-set goals are higher than assigned goals. In addition, the first basic proposition of goal-setting theory is that goals energize performance by motivating people to exert effort in line with the difficulty or demands of the goal (Miner, 2015, p. 164). This implies that self-set goals, having a higher level of difficulty, should motivate people to exert more effort in a given task than assigned goals. The second proposition of goal-setting theory is that goals motivate people to persist in activities through time (Miner, 2015, p. 164). Taken together, these propositions suggest that self-set goals are linked with the vigor component of work engagement, as they lead to high levels of energy and mental resilience while working. The third and final proposition of goal-setting theory is that goals direct people's attention to relevant behaviours or outcomes, and away from nongoal-relevant activities (Miner, 2015, p. 164). Thus, setting a goal should increase an individual's concentration while working and thereby affecting absorption, the last component of work engagement.

Based on the aforementioned arguments, theory and research findings, the following hypothesis is formulated:

Hypothesis 3: Self-goal-setting will mediate the relationship between daily empowering leadership behaviours, in the form development support, and employees' daily level of work engagement.

Method

Research design

The current study has adopted a quantitative diary study design where participants filled out a survey each day over a period of 30 days. Taking such an approach allows me to examine what causes daily changes in an individual's score. For instance, the level of a person's work engagement is likely to variate from day to day (Breevaart et al., 2012). Thus, the person's score on work engagement is compared to his or her own score on work engagement on the other days, and thereby uncovering within-person differences. In contrast, a cross sectional design would compare the person's score on work engagement with other people's score, and thus capturing between-person differences. When studying an unstable construct such as work engagement, solely looking at between-person differences will not provide an accurate or realistic description of the phenomenon. The diary methodology uncovers the dynamic part of work engagement (Breevaart et al., 2012), and was therefore considered appropriate for the current study.

Participants

The original sample consisted of 89 cadets, however, two of the cadets failed to complete their exams which was a prerequisite for participation. This resulted in a response rate of 97,8%, with 68 of the participants being male and 18 being female (1 missing). As for their military background, 79 were naval cadets while the remaining 7 were from the army (1 missing). The youngest cadet was 19 and the oldest was 30. The average age was 23.

Procedure

All data in this study was gathered from cadets connected the Royal Norwegian Naval Academy, who participated in a mandatory 11-week voyage across the Atlantic. During this trip, the cadets were to function as the crew and officers of a sail ship named Statsraad Lemkuhl. They continually rotated in job roles and guard shifts in order to keep the ship operative at all times. They also rotated on the formal leadership roles, allowing each cadet to practice leadership as a part of their leadership education.

Before the voyage, the cadets where asked to fill out a survey measuring traits such as personality, gender and age. While on the sail ship, the cadets were asked to fill out a survey measuring dynamic variables such as work engagement and performance. This was done every day at 05:00 PM for 30 days.

Ethics

The naval academy already had a concession from the Norwegian center for research data (NSD) for the gathering of anonymous data from the cadets. During the entirety of the research process, the cadets' confidentiality was retained. In order to avoid the use of personal information, each of the cadets were given a code to remember. The code list was later destroyed on board the ship, so that the cadets where the only ones who could link themselves to the data. Before the study, the cadets signed an informed consent where they were given information regarding participation and the possibility of withdrawal at any time. Since diary studies can be demanding, in addition to the already demanding situations onboard the ship, the cadets were given information about the value of their contribution as well as a general feedback of the results after the voyage.

Measures

Daily work engagement was measured with a short version (9 items) of the *Utrecht Work Engagement Scale* (Schaufeli, Salanova, González-Romá & Bakker, 2001; Balducci, Fraccaroli & Schaufeli, 2010). The statements were adapted to fit the cadets work related tasks and could be answered on a 5-point scale ranging from 1 (totally disagree) to 5 (totally agree). The scale had a good internal reliability as the Cronbach's alpha showed an average internal reliability of .872 (Pallant, 2010). Sample items are "On today's shift I was full of energy", "On today's shift I was inspired by my job" and "When I woke up today, I was looking forward to my shift".

Daily empowering leadership was measured with a short version of Amundsen and Martinsen's (2014) *Empowering Leadership Scale*. From their validation study (Amundsen & Martinsen, 2014), the six items with the highest factor loadings were chosen. Accordingly, three items for autonomy support and three items for development support. The scale was adapted to measure daily levels and could be answered on a 5-point scale ranging from 1 (totally disagree) to 5 (totally agree). Internal reliability was measured with Cronbach's alpha at a daily level. The autonomy support subscale had an average internal reliability of .62, which is considered acceptable (Pallant, 2010). The development support subscale had an average internal reliability of .80, which is considered good (Pallant, 2010). Sample items are "On today's shift, my closest leader encouraged me to take initiative" and "On today's shift, my closest leader provided guidance in how I can do my job in the best possible way".

Daily psychological empowerment was assessed with Spreitzer's (1995) 12-item scale, which comprises three items each for the four subdimensions. The scale was adapted to measure daily levels and could be answered on a 5-point scale ranging from 1 (totally disagree) to 5 (totally agree). The scale had an acceptable internal reliability as the Cronbach's alpha showed an average internal reliability of .735 (Pallant, 2010). Sample items are "On today's shift, the work I did was very

important to me", "On today's shift, I was confident about my ability to do my job", "On today's shift, I had significant autonomy in determining how I do my job" and "On today's shift, my impact on what happens in my department was large".

Daily self-goal-setting was measured with three items from the behavioral focused strategies of the revised self-leadership questionnaire (Houghton & Neck, 2002). The scale was adapted to measure daily levels and could be answered on a 7-point scale ranging from 1 (totally disagree) to 7 (totally agree). The scale had an excellent internal reliability as the Cronbach's alpha showed an average internal reliability of .940 (Pallant, 2010). Sample items are "Today, I consciously had goals in mind for my work efforts" and "On today's shift, I have been working towards specific goals that I set for myself".

Results

Descriptive statistics

Table 1 contains the means, standard deviations and the estimated correlations between the variables under study. The correlations above the diagonal are at the within-person level, while the correlations below the diagonal are at the between-person level.

At the day-level (within-person) there is a significant correlation between autonomy support and development support ($r = .26$, $p < .01$). Autonomy support also shows a significant correlation with work engagement ($r = .16$, p. $< .01$), psychological empowerment ($r = .21$, $p < .01$) and self-goal-setting ($r = .13$, $p < .01$). In addition, development support is positively and significantly correlated with work engagement ($r = .09$, $p < .01$), psychological empowerment ($r = .13$, $p < .01$) and self-goal-setting ($r = .11$, $p < .01$). Work engagement has a significant positive correlation with psychological empowerment ($r = .51$, $p < .01$) and self-goal-setting ($r = .32$, $p < .01$). Psychological empowerment and self-goal-setting also shows a significant correlation ($r = .29$, $p < .01$).

Table 1 also illustrates several significant correlations between persons. At this level, autonomy support is significantly correlated with development support ($r = .48$, $p < .01$). Autonomy support also has a positive relationship with work engagement ($r = .43$, $p < .01$), psychological empowerment ($r = .51$, $p < .01$) and self-goal-setting ($r = .36$, $p < .01$). Development support shows a positive relationship with work engagement ($r = .42$, $p < .01$), psychological empowerment ($r = .54$, $p < .01$) and self-goal-setting ($r = .38$, $p < .01$). As for work engagement, it is positively correlated with psychological empowerment ($r = .77$, $p < .01$) and self-goal-setting ($r = .41$, $p < .01$). There is also a positive relationship between psychological empowerment and self-goal-setting ($r = .49$, $p < .01$).

Table 1. Means, standard deviations and estimated correlations between the variables under study.

	M	SD	1	2	3	4	5
1. Autonomy support	3.63	.55	1.00	.26**	.16**	.21**	.13**
2. Development support	3.00	.64	.48**	1.00	.09**	.13**	.11**
3. Work Engagement	3.33	.62	.43**	.42**	1.00	.51**	.32**
4. Psychological Empowerment	3.36	.55	.51**	.54**	.77**	1.00	.29**
5. Self-Goal-Setting	3.37	.83	.36**	.38**	.41**	.49**	1.00

The correlations above the diagonal are at the within-person level and the correlations below the diagonal are at the between-person level. **p<.01

Multilevel analysis

Table 2 displays the results after testing a null model, a main model and a mediation model. The null model reveals that 23% of the variance in work engagement is explained by variance between individuals, while the remaining 77% is explained by variance within individuals. The main model shows a significant effect from the autonomy support dimension of empowering leadership on work engagement (B = .144, p < .01). The mediation model displays the effect from autonomy support on work engagement, after controlling for psychological empowerment. As a predictor variable, autonomy support is significantly related to both psychological empowerment (mediator) (B = .167, p <.01) and work engagement (dependent variable) (B = .144, p < .01). Mediation was tested with a mediation analysis in MlwiN version 2.35 (Rasbash, Steele, Browne, Goldstein & Charlton, 2015). The positive effect from autonomy support on work engagement was reduced after controlling for psychological empowerment, although the effect still remained significant (B = .052, p < .01). In order to test whether psychological empowerment carries the influence of autonomy support to work engagement, a Sobel test was performed (Preacher & Hayes, 2008). The result show that the indirect effect was significant (z = 7.8, p < .01).

Table 2. Multilevel estimates for the prediction of work engagement.

	Null model		Main model		Mediation model	
	B	SE	B	SE	B	SE
Constant	3.336	.03	3.292	.036	3.320	.036
Autonomy support			.144**	.024	.052**	.022

Psychological empowerment					.549**	.025
Variance level 1 (person)	.089**(23%)	.015	.099**	.017	.098**	.017
Variance level 2 (day)	.301**(77%)	.009	.279**	.009	.225**	.007
-2 Log likelihood	4179.862		3301.547		2885.552	

Note: ** p < .01, * p < .05. N=87; Occasions: 2610

Table 3 displays a main model and a mediation model for the remaining variables. The main model reveals a significant effect from the development support dimension of empowering leadership on work engagement (B = .089, p < .01). The mediation model displays the effect from development support on work engagement, after controlling for self-goal-setting. As a predictor variable, development support is significantly related to both self-goal-setting (mediator) (B = .112, p < .01) and work engagement (dependent variable) (B = .083, p < .01). Once again mediation was tested with a mediation analysis in MlwiN version 2.35 (Rasbash et al., 2015). The positive effect from development support on work engagement was reduced after controlling for self-goal-setting, although the effect still remained significant (B = .056, p < .05). In order to test whether self-goal-setting carries the influence of development support to work engagement, a Sobel test was performed (Preacher & Hayes, 2008). The result show that the indirect effect was significant (z = 3.69, p < .01).

Table 3. Multilevel estimates for the prediction of work engagement.

	Null model		Main model		Mediation model	
	B	SE	B	SE	B	SE
Constant	3.336	.03	3.291	.036	3.304	.036
Development support			.083**	.025	.056*	.024
Self-goal-setting					.235**	.019
Variance level 1 (person)	.089**(23%)	.015	.099**	.017	.102**	.017
Variance level 2 (day)	.301**(77%)	.009	.282**	.009	.261**	.008
-2 Log likelihood	4179.862		3323.510		3171.318	

Note: ** p < .01, * p < .05. N=87; Occasions: 2610

Discussion

Summary of findings

The main goal of the study was to investigate whether daily empowering leader behaviours, in the form of autonomy support and development support, are related to daily work engagement, and then further investigate how and why each of these two dimensions are contributing to work engagement. More specifically, it was investigated whether the relationship between autonomy support and work engagement works through psychological empowerment, and whether the relationship between development support and work engagement can be explained by self-goal-setting.

In line with hypothesis H1a, the results reveal a positive relationship between the autonomy support dimension of empowering leadership and work engagement. Hypothesis H1b is also supported, as the results show a positive relationship between development support and work engagement. These findings suggest that empowering leader behaviours will facilitate subordinate work engagement, regardless if the behaviours are autonomy supportive or development supportive.

As for the mediators, psychological empowerment was found to mediate the relationship between autonomy support and work engagement, thus providing support for hypothesis 2. Support for hypothesis 3 was also found, as self-goal-setting mediated the relationship between development support and work engagement. Such findings indicate that the two dimensions of empowering leadership does indeed contribute to work engagement through distinct influence processes. In other words, this study supports Amundsen and Martinsen's (2014) perspective on empowering leadership by specifying how each dimension (autonomy support and development support) has a distinct influence on mediating processes (psychological empowerment and self-goal-setting) and outcomes (work engagement).

In the following, daily variations in in work engagement will discussed before proceeding with the hypotheses in chronological order. Lastly, methodological considerations will be addressed followed by theoretical and practical implications and suggestions for future research.

Daily variations in Work engagement

A prerequisite for adopting a daily diary design when studying work engagement is that it variates from day to day. In the arguably most agreed upon definition, work engagement is described as a state of mind (Schaufeli & Bakker, 2004, 2010), not as a stable trait or characteristic. Indeed, research has shown that 30-40% of the variance in work engagement is explained within persons over the working week (Sonnentag, 2003; Xanthopoulou et al., 2009). In line with this, the results from the

current study suggest that work engagement fluctuates from day to day, as variations was mostly explained by variations within the cadets across the 30 days (77%). This amount of variance is considerably larger than what previous research has shown. A potential explanation is that the cadets rotated on the formal leadership role. In this instance, it is likely that the cadets differ in the extent to which they engage in empowering leadership behaviours, and the perceived amount of resources available should therefore variate accordingly, thus causing daily variations in work engagement. To be more specific, an implication of having a new leader each day is that the cadets are likely to experience different levels of autonomy and receive different types of coaching, depending on who is the leader on that day. As theory would have it (Bakker & Demerouti, 2007), daily variations in the amount of available job resources should result in daily variations in work engagement. As such, a significant amount of variance is left to be explained by within-person fluctuations, justifying the current multi-level approach.

The empowering leadership vs. work engagement relationship

While previous research already has established a positive relationship between empowering leadership and work engagement (Albrecht & Andreetta, 2011; Greco, Laschinger & Wong, 2006; Mendes & Stander, 2011; Tuckey et al., 2012), the current study investigated the distinct influence from each of the two empowering leadership dimensions on work engagement on a daily basis. The results reveal that cadets who experience empowering leadership, either in the form of autonomy support or development support, will become more engaged in their work.

In line with hypothesis H1a, the results demonstrate that cadets who experience autonomy support on a daily basis will become more engaged in their work on these days. In other words, on days when the leader engages in behaviours that either share power with or motivates the cadets to work autonomously, they will become increasingly more engaged. This can be explained by the job demands-resources model (Bakker & Demerouti, 2007) where job resources are considered to be the main initiators of employees' engagement. Autonomy supportive behaviours may be considered as job resources in that they are functional in achieving work goals and reducing job demands (Bakker & Demerouti, 2007). For instance, the empowering leader may increase the likelihood of a cadet achieving a work goal by encouraging personal initiative and goal focus, and reduce the perceived demands from having high levels of responsibility by providing the authority to choose the way in which to approach situations. Thus, the more autonomy supportive behaviours a leader engages in on a specific day, the more job resources are perceived to be available by the cadets and thereby making them become more engaged in their work on that day.

To elaborate on this process, job resources either play an intrinsic motivational role because they foster employees' growth, learning and development, or they play an extrinsic motivational role because they are instrumental in achieving work goals (Bakker & Demerouti, 2007, p. 313). In the former case, autonomy supportive leader behaviours such as delegation of formal authority and efficacy support should fulfill the basic psychological needs for autonomy, relatedness and competence respectively (Amundsen & Martinsen, 2014). According to the Self-determination theory, having these basic human needs satisfied is essential for psychological growth, well-being and provides the individual with identified and intrinsic motivation (Deci & Ryan, 2000). In addition, the satisfaction of these needs in particular has been found to be positively related to work engagement (Deci et al., 2001). Thus, from a theoretical perspective, when the empowering leader engages in behaviours within the autonomy support dimension, the cadets' basic psychological needs are satisfied, resulting in psychological growth, intrinsic motivation and work engagement. As for the extrinsic motivational role, the effort-recovery model (Meijman & Mulder, 1998) proposes that work environments that offer many resources foster the willingness to dedicate one's efforts and abilities to the work task. In return, it is more likely that the task will be completed and that the work goal will be attained (Bakker & Demerouti, 2007, p. 314). In either case, be it through the satisfaction of basic needs or through the successful completion of a task, the outcome of available job resources is positive and engagement is likely to occur (Schaufeli & Bakker, 2004; Schaufeli & Salanova, 2007). This is in line with the results obtained by Tuckey and colleagues (2012), who found that empowering leadership promoted work engagement through intrinsic and extrinsic motivational processes. In sum, it appears that the daily autonomy supportive leader behaviours function as job resources in promoting daily motivation and subsequent work engagement among the cadets.

In accordance with hypothesis H1b, the results show that the empowering leader's daily development supportive behaviours have a positive effect on the cadets' daily level of work engagement. Thus, on days when the empowering leader engages in behaviours aimed at facilitating subordinates' continuous learning and development, work engagement is likely to increase among the cadets on that day. Once again, the job demands-resources model (Bakker & Demerouti, 2007) provides a potential explanation for the relationship. The behaviours within the development support dimension may be regarded as job resources in that they are functional in achieving work goals, reducing demands or stimulating personal growth, learning and development (Bakker & Demerouti, 2007). For instance, when the leader either models a certain behaviour or guides the cadets through coaching and teaching, the cadets are presented with learning opportunities in which they can develop their knowledge and skills. Having the knowledge and skills necessary to complete a work task is likely to help the cadets achieve work goals. Knowledge and skills are also resources in

themselves, and should therefore reduce the perceived amount of demands associated with the task at hand (Bakker & Demerouti, 2007). Thus, being regarded as job resources, development supportive behaviours have motivational potential and lead to high work engagement (Bakker & Demerouti, 2007, p. 313).

This process has similar theoretical explanations as to the relationship between autonomy support and work engagement. When a job resource fosters personal growth, learning and development, intrinsic motivation and work engagement arise (Bakker & Demerouti, 2007). Accordingly, the leader's role modeling and guidance should lead to intrinsic motivation, and thereby work engagement, as they influence the cadets' continuous learning and development (Amundsen & Martinsen, 2014). In line with this, Amundsen and Martinsen (2014) showed that the two distinct dimensions of empowering leadership appeared to be consistent with supportive behaviours described as important for satisfying the basic psychological needs in the Self-determination theory (p. 506). Clearly, development supportive behaviours have intrinsic motivational potential. However, these behaviours may also play an extrinsic motivational role in facilitating work engagement, as learning through observation and receiving guidance should aid the cadets in achieving their goals and/or reduce demands. Thus, as the leader engages in role modeling or provides guidance, the cadets should be more willing to dedicate their efforts and abilities to the work task (Meijman & Mulder, 1998) and become more engaged in their work.

The mediating role of Psychological empowerment

According to hypothesis 2, psychological empowerment mediates the relationship between day-level autonomy support and work engagement. Following Baron and Kenny (1986), the required conditions for mediation were examined: (a) the predictor should be related to the outcome; (b) the predictor should be related to the mediator; (c) the mediator should be related to the outcome when controlling for the predictor; and (d) the predictor-outcome relationship becomes non-significant (full mediation), or becomes significantly weaker (partial mediation) after the inclusion of the mediator. Although all four conditions were met, the relationship between autonomy support and work engagement became significantly weaker, yet still remained significant after adding psychological empowerment to the equation. Thus, the results suggest that psychological empowerment partially mediates the relationship, leaving some parts of the relationship unexplained.

Psychological empowerment is, like work engagement, a motivational construct. In addition, most of the cognitions within the concept (meaning, competence and impact) are based on self-evaluations and, to a certain extent, refer to individuals' sense of their ability to control and impact

upon their environment successfully. As such, the concept of psychological empowerment is consistent with Hobfoll and colleagues' (2003) definition of personal resources. For instance, the cognition of competence concerns the belief in one's ability to successfully perform tasks (Zhang & Bartol, 2010, p. 110). Thus, it is an evaluation of oneself regarding the ability to successfully impact upon the environment. An implication of the nature of psychological empowerment, as a motivational construct and a personal resource, is that its mediating function can be explained by the extended Job demands-resources model (Xanthopoulou et al., 2007), which incorporates personal resources, and Hobfoll's conservation theory (Hobfoll, 1989).

According to the model and consistent with research by Xanthopoulou and colleagues (2007, 2009), personal resources mediates the relationship between job resources and work engagement. This process may be explained by Hobfoll's conservation of resources theory (1989), which states that people do not only try to protect their resources, but also seeks to accumulate them. Since resources do not exist in isolation, developmental processes create "resource caravans" in a way that, for example, cadets having autonomy over their tasks (job resource) are likely to increase their self-efficacy beliefs (personal resource), which ultimately leads to higher work engagement (Xanthopoulou et al., 2009, p. 185). However, if job resources are not available, individuals will lean toward prevention of resource loss rather than attempting to gain new ones (Hobfoll, 1989). Thus, if job resources are available, individuals will seek to accumulate personal resources and thereby making them become more engaged in their work. This appears to be in line with the obtained results in the current study, as psychological empowerment (personal resource) mediated the relationship between autonomy support (job resource) and work engagement.

Even though there is a tendency for job resources to breed personal resources, this does not mean that all job resources may lead to all personal resources in any situation. For instance, although time may be considered a job resource, it is not given that time will lead to self-efficacy (personal resource), especially not across all situations. Indeed, specific job and personal resources are usually incorporated as a function of the context under study (Xanthopoulou et al., 2007). In this case, because the autonomy sportive behaviours are aimed at influencing the cadet's autonomy and autonomous motivation, and because the outcome variable is motivational in it's nature, the context indicates a need for a mediator variable that accounts for motivation. Psychological empowerment was considered appropriate in this instance, as it concerns intrinsic motivation. However, although intrinsic motivation is essential, such motivation alone is not sufficient to feel psychologically empowered. In addition to being intrinsically motivated, one has to experience feelings of either meaning, competence, self-determination or impact. The current study included psychological empowerment as one unitary construct and did not investigate the potentially unique paths for each

cognition. Yet, previous research can be drawn upon to shed some light on the processes by which autonomy supportive behaviours affect each of the four cognitions of psychological empowerment.

The empowering leader may influence the cognition of meaning through the autonomy supportive behaviour of information sharing. To elaborate, an empowering leader can enhance the meaningfulness of work by providing information about the overall goals and mission (Conger & Kanungo, 1988). Feelings of competence, being the second cognition of psychological empowerment, is likely to be affected when the leader provides efficacy support (Deci, Conell & Ryan, 1989). Thus, when the leader listens to the cadets' opinions, ideas and suggestions, feelings of being considered and taken into account arise which have implications for efficacy (Deci, Conell & Ryan, 1989). The autonomy supportive leader behaviours also seems to affect the third cognition of psychological empowerment. More specifically, feelings of self-determination is likely to be the outcome when the leader delegates formal authority, encourages the subordinate to decide how to carry out their jobs and removes bureaucratic constraints (Baek-Kyoo et al., 2016, p. 1074). At last, feelings of having an impact is likely to arise among the cadets when the leader promotes their participation in decision making and provides efficacy support (Amundsen & Martinsen, 2015, p. 307). In other words, if employees feel that their ideas are respected and valued in a decision-making process, they will have a strong sense of control over the immediate work situation and their sense of impact will be heightened (Baek-Kyoo et al., 2016, p. 1074). It is worth noting that all the leader behaviours mentioned in this section is considered by Amundsen and Martinsen (2014) to be autonomy supportive. As such, the results from the current study, combined with previous research, suggests that autonomy supportive leader behaviours have the potential to affect all four cognitions of psychological empowerment. An important notion to highlight here is that all the cognitions of psychological empowerment combine additively to create the overall construct (Spreitzer, 1995). This implies that the lack of any single dimension will deflate, though not completely eliminate, the degree of felt empowerment (Spreitzer, 1995, p. 1444). Thus, the more autonomy supportive behaviours the leader engages in on a given day, the more cognitions are affected which in turn increases the degree of felt empowerment among the cadets on that day.

Yet to be explained is how personal resources, or psychological empowerment in particular, facilitates work engagement on a daily basis. Research has previously established a positive relationship between personal resources and work engagement. For instance, Xanthopoulou and colleagues (2008) showed that self-efficacy, self-esteem and optimism (personal resources) make a unique contribution to explaining variance in work engagement, over and above the impact of job resources and previous levels of work engagement. Bakker, Gierveld and van Rijswijk (2006) made similar discoveries as their results demonstrated that those with the most personal resources scored

highest on work engagement. According to Judge and collaegues (2005), the more personal resources an individual possesses, the more positive their self-regard and the more goal self-concordance is expected to be experienced. Individuals with goal self-concordance are intrinsically motivated to pursue their goals, and as a result they trigger outcomes such as work engagement, performance and satisfaction (Bakker et al., 2008). Thus, on days when the cadets are feeling psychologically empowered, they are intrinsically motivated with a positive self-regard as they feel like their work is personally important (meaning), believe in their abilities to successfully perform tasks (competence), perceive freedom in choosing how to initiate and carry out tasks (self-determination) and/or view their behaviours as making a difference in work outcomes (impact). As a result, they should experience more goal self-concordance and become more engaged in their work. This is also supported by research, where psychological empowerment was found to positively influence employee engagement (Albrecht & Andreetta, 2011; Jose & Mampilly, 2015).

On a more specific level, it is likely that each of the cognitions of psychological empowerment make their own contribution to work engagement. It can be argued that each cognition represents a personal resource in its own right. For instance, Xanthopoulou and colleagues (2008) considered self-efficacy to be an important personal resource in facilitating work engagement. In similar vein, the cognition of competence concerns an individual's self-efficacy, or belief in one's ability to successfully perform tasks (Zhang & Bartol, 2010, p. 110). In this way, feelings of competence, as a cognition of psychological empowerment, is considered a personal resource. The same goes for the cognition of meaning and impact as they are both, to some extent, based on self-evaluations, linked to resiliency and refer to individuals' sense of their ability to control and impact upon their environment successfully (Hobfoll, Johnson, Ennis, & Jackson, 2003). The cognition of self-determination appears to be more controversial in terms of categorization. Because it concerns the degree of perceived autonomy, it is an aspect of the job rather than a self-evaluation. As such, considering the cognition of self-determination as a job resource appears to be more accurate. Following these assumptions, and according to the job demands-resources model, each cognition should make contributions to work engagement.

Once again, research can be drawn upon for support. According to May and colleagues (2004), meaningfulness in work fosters employees' motivation and attachment to work, and thereby resulting in work engagement. Regarding the cognition of competence, it has been found to be strongly correlated with work engagement (Maslach et al., 2001). In addition, it has been found to fully mediate the relationship between day-level autonomy and work engagement (Xanthopoulou et al., 2009). The cognition of self-determination, being a job resource rather than a personal resource, should lead to work engagement through the motivational processes described in the job demands-

resources model (Bakker & Demerouti, 2007). As for the cognition of impact, Stander and Rothman (2010) argued that individuals' belief that their actions are making a difference in their organization will contribute to work engagement. Thus, it appears that all four cognitions of psychological empowerment have the potential to influence the level of work engagement among the cadets. Since the cognitions are argued to contribute additively to the overall construct of psychological empowerment, they should also contribute additively to the level of work engagement. This means that the more autonomy supportive behaviours the leader engages in on a specific day, the more cognitions of psychological empowerment are affected. This should in turn increase the overall degree of felt empowerment and result in higher levels of engagement among the cadets on that day.

The mediating role of self-goal-setting

According to hypothesis 3, self-goal-setting mediates the relationship between day-level development support and work engagement. Once again, the required conditions for mediation were examined (Baron & Kenny, 1986). All four conditions were met, but the relationship between development support and work engagement remained significant after including self-goal-setting. As such, it appears that self-goal-setting only partially mediates the relationship, thus leaving some parts of it unexplained.

Drawing from the definition, self-leadership is a set of skills and strategies that individuals use to influence themselves toward higher levels of performance and effectiveness (Manz & Sims, 1989). An implication of this definition is that self-goal-setting, being a part of the overall self-leadership concept, is also considered a skill or a strategy. For this reason, the personal resources adaptation model (Heuvel et al., 2010) may be help explain the mediating function of self-goal-setting in the relationship between development support and work engagement. Although this model was developed to predict work engagement in dynamic contexts, meaning that it addresses how individuals react in the face of change, it was considered appropriate in the current study as the cadets are placed in a new and unfamiliar context. In addition, because they continually rotated on job roles and guard shifts, they were likely to experience change from day to day.

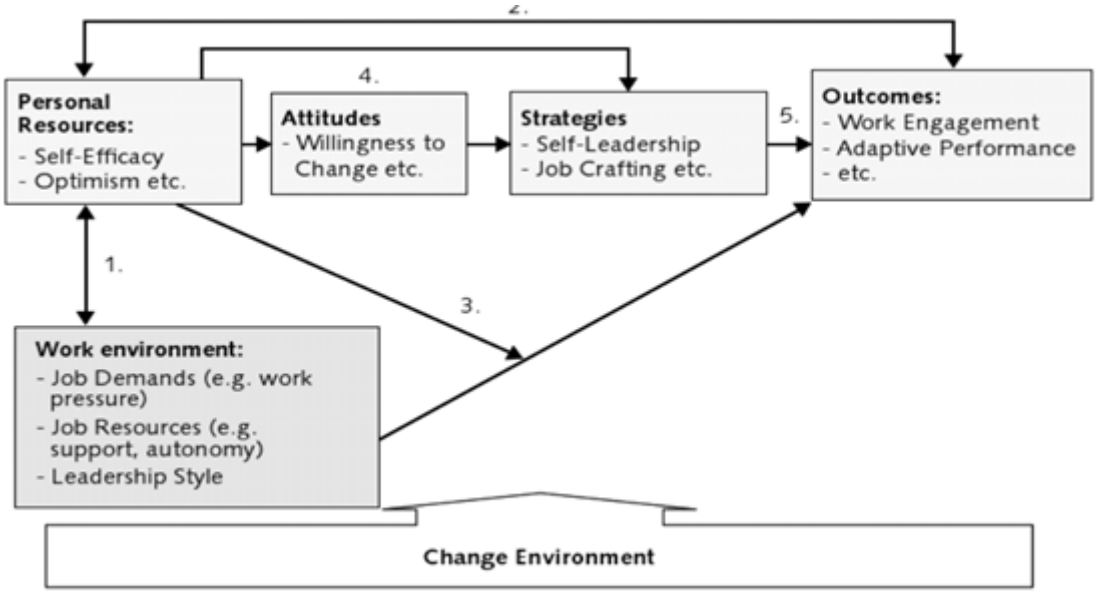

Figure 2. The personal resources adaptation model.

The model suggests that personal resources are translated into (cognitive) behavioral strategies which in turn have consequences for work engagement (Heuvel et al., 2010). These strategies are either applied to manage the external change environment (i.e job crafting and active coping), or to manage oneself (self-regulation and self-leadership) (Heuvel et al., 2010). As is displayed in figure 2, self-leadership, and thereby self-goal-setting, is proposed to be one of these strategies. Although there is no direct link between job resources and choice of strategy, the model suggests an indirect link where job resources breed personal resources, which in turn affects strategy (Heuvel et al., 2010). In relation to the current study, development supportive behaviours (modeling and guidance) are aimed at influencing the cadets' continuous learning and development, and may therefore be considered as job resources (Bakker & Demerouti, 2007). Thus, the model suggests an indirect link between development support and self-goal-setting. In this case, it is likely that when the leader models a certain behaviour and/or provides guidance, job resources are perceived to be available which should start a motivational process where the cadets invest resources in order to gain other resources (Hobfoll, 1989). In this way, the cadets may invest available job resources to gain personal resources. For instance, Xanthopoulou and colleagues (2009) showed that the relationship between day-level coaching (a form of guidance) and work engagement was mediated by self-efficacy (a personal resource). Because personal resources are linked to resiliency per definition (Hobfoll et al., 2003), individuals with more personal resources should also be more resilient in the face of change (Heuvel et al., 2010). Maddi (2005) showed that resilient employees used more adaptive behavioral and cognitive strategies than less resilient employees. Thus, when the empowering leader engages in development supportive behaviours, job resources are perceived to

be available by the cadets which makes them accumulate personal resources, which in turn makes it more likely that they will engage in adaptive coping strategies, such as self-goal-setting, in the face of change. This process in turn should result in increased work engagement. As such, it appears that the results of the current study are in compliance with the model as daily development support from the leader facilitated daily self-goal-setting, which ultimately resulted in increased work engagement on that day.

Although the personal resources adaptation model is helpful in explaining general tendencies, it does not provide a specific explanation of the relationship under study. For instance, the model doesn't explain why role modeling and guidance by the leader makes the cadets engage in self-goal-setting. With basis in previous research, the following paragraph presents a more accurate and specific description of the relationship between development support and self-goal-setting.

The following arguments are based on three assumptions made in previous studies. First, because self-goal-setting is considered a strategy, it can be taught and learned (Frayne & Latham, 1987; Latham & Frayne, 1989; Manz & Sims, 2001). Second, empowering leaders are known to be effective self-leaders (Manz & Sims, 1991, 2001). This automatically implies that they are also efficient self-goal-setters. Third, empowering leaders influence their employees' learning and development through role modeling and guidance (Amundsen & Martinsen, 2014). If these assumptions are true, the empowering leader should be able to transmit their self-leadership skills onto the cadets, be it through role modeling or guidance. According to Manz and Sims (2001), the first step in teaching self-leadership, and thereby self-goal-setting, is to practice self-leadership in a vivid and recognizable manner that can serve as a model for others (p. 61). Thus, when the leader displays self-goal-setting behaviours, it allows the cadets to learn and adopt these behaviours through observation. The leader may also facilitate self-goal-setting behaviour in the cadets by providing guidance in the form of coaching or teaching. In this instance, the verbal behaviour of the leader is critical (Mans & Sims, 2001). The leader can evoke self-goal-setting among their followers through a series of directed questions (Manz & Sims, 2001). For example, the leader might ask a goal-related question such as "What will your target be?". If the leader continually asks goal-related questions, combined with constructive suggestions, instruction and coaching in goal-setting, the cadets gets practice in thinking about and then implementing their own self-set goals (Manz & Sims, 2001). Thus, previous research appears to be consistent with the obtained results in the current study, as role modeling and guidance were found to be behaviours that the empowering leader utilize in order to promote self-goal-setting behaviour in the cadets. In turn, when the cadets set their own goals, engagement increases. In the following, the latter process will be discussed in more detail.

The theory of goal-setting revolves around why some people perform better on work tasks than others (Latham & Locke, 1991). If one cadet performs better than another, and they are equal in ability and knowledge, then the cause must be motivational (Latham & Locke, 1991). The theory states that the simplest and most direct motivational explanation of why some people outperform others is because they have different performance goals (Latham & Locke, 1991, p. 213). Indeed, goals are closely related to motivation and thereby work engagement. According to the goal-setting-theory, there are three attributes of goal-setting in regards to motivated action (Latham & Locke, 1991). First, a goal directs activity toward actions which are relevant to it at the expense of actions that are not goal-relevant (Locke & Latham, 1991, p. 227). For instance, in prose learning, giving readers learning objectives leads them to pay more attention to the content which is relevant to those objectives and less attention to the rest (Rothkopf & Billington, 1979). This implies that setting a goal in relation to the task at hand should help the cadets focus on actions that promotes goal-attainment, while simultaneously directing focus away from actions that are not relevant to the goal. In this way, self-set goals affect the absorption component of work engagement as they help the cadets become fully concentrated in their work. Second, a goal regulates effort or energy expenditure in that people adjust their effort to the level of difficulty of the goal (Latham & Locke, 1991). A notion to highlight here is that self-set goals usually have a higher level of difficulty than assigned goals (Latham et al., 1978). This implies that self-set goals should make the cadets exert more effort in a work task than if the goals were assigned. As such, self-goal-setting also relates to the vigor component of work engagement, which is characterized by high levels of energy while working (Schaufeli & Bakker, 2004, 2010). However, the vigor component of work engagement also concerns mental resilience while working (Schaufeli & Bakker, 2004, 2010), meaning that cadets who experience great vigor will remain very persistent, even when facing difficulties (Mauno et al., 2007). According to the third proposition of goal-setting theory, goals affect persistence through time. From a theoretical perspective, then, setting a goal for oneself while working will contribute to a positive and fulfilling work-related state of mind in which the cadets experience high levels of energy and mental resilience (vigor) and become fully concentrated (absorption) while pursuing the goal. This is also consistent with Latham and Locke (1991), who asserted that when effort and persistence alone is required for performance, training in self-goal-setting is effective.

Other theories of goal-setting may also be drawn from to elaborate on the relationship between self-goal-setting and work engagement. On the basis of Self-determination theory, Sheldon and Elliot (1998, 1999) proposed a self-concordance model for goal selection. According to the model, goals are defined as self-concordant when they are integrated with the “self” (Sheldon & Elliot, 1999). These goals are pursued because of either intrinsic motivation, meaning that the person

acts because the activity is inherently interesting, or because of identity congruence, which is when the person acts with a sense of choice and volition, even if the task is not interesting or enjoyable (Sheldon & Elliot, 1999; Brunstein & Gollwitzer, 1996; Little, 1993). The distinction here is not whether the goals are pleasurable or not, but whether the cadets feel ownership as they pursue their goals (Sheldon & Elliot, 1999). In one sense, all self-set goals are self-determined, yet this does not mean that they all have their origin in intrinsic values. Once again, consider a dull task such as cleaning the deck. In relation to this task, the cadets may set their own goals, but they will most likely not pursue these goals for intrinsic reasons, as the task is not perceived to be particularly interesting or challenging. However, because the goals were self-set, they should experience a sense of ownership and thereby identity congruence as they pursue the goals with a sense of choice and volition (Brunstein & Gollwitzer, 1996; Little, 1993). In this way, self-set goals are also self-concordant, as they are integrated with the "self". The pursuit of self-concordant goals has previously been found to promote sustained effort, which leads to high goal progress (Haase, Heckhausen, & Köller, 2008; Ryan & Connell, 1989; Sheldon & Elliot, 1998, 1999; Sheldon & Houser-Marko, 2001; Sheldon, Ryan, Deci & Kasser, 2004). Making progress toward a goal, in turn, has been found to be positively related to work engagement (Vasalampi, Salmela-Aro & Nurmi, 2009). This process is further supported by Bloom and colleagues (2015), who found a positive correlation between self-goal-setting and work engagement. Thus, one way in which the empowering leader can stimulate motivation, and thereby work engagement, is by modeling self-goal-setting behaviours and providing guidance so that the cadets may learn and implement this behavioral strategy themselves. Having a self-set goal to pursue should make the individual cadet exert more effort into the task and remain persistent even in the face of difficulties. This in turn should facilitate the cadet's goal progress and subsequent work engagement.

Methodological considerations

In order to evaluate and interpret the results of the current study, strengths and limitations must be taken into consideration. First and foremost, most psychological variables are dynamic in their nature (Ployhart & Vandenberg, 2010), including leadership (Breevaart et al., 2015) and employees' work behaviours (Petrou, Demerouti, Peeters, Schaufeli & Hetland, 2012). As such, studying empowering leadership and work engagement on a daily basis was considered appropriate, if not necessary. Because the variables can variate from day to day within the same person, one may miss out on important information by not studying daily fluctuations (Ohly et al., 2010). A daily diary study design allows the researcher to capture both between-person and within-person differences (Ohly et al., 2010), which in turn contributes to a deeper understanding of the processes that underlie dynamic

relationships in an organizational context (Dalal, Bhave & Fiset, 2014). This helps research move beyond the rather static models of human behaviour in the work context (Ohly et al., 2010).

Another strength lies in the amount of measurements, as all cadets (87) were measured on different variables each day for 30 days. Combined with a high response rate (<90%), this provides better opportunities to draw conclusions on the basis of statistical findings. The current study design also reduces the occurrence of retrospective bias (Reis & Gable, 2000). Thus, a daily diary design may reflect leaders' behaviours more accurately as the cadets only have to think back over several hours, as oppose to several weeks or months, when they rate their leaders behaviours. In addition, the daily diary design provides a more comprehensive understanding as it examines leadership in its natural context, which tells us something about the extent to which trait like leadership processes are similar to state like leadership processes (Breevaart et al., 2014a). Despite the strengths, however, the current study also has limitations.

First, because the variables were measured onboard a sail ship, one cannot infer with certainty that every cadet followed the protocol. To elaborate, the cadets were instructed to fill out a daily survey at a certain time of day. However, because the cadets rotated on job roles and guard shifts and were constantly faced with demanding tasks, it is likely that they did not fill out the survey at the same point in time each day. This was difficult to control as the surveys were administered and filled out with the pen and paper method. In this instance, not following protocol may have consequences for retrospection. It is worth noting that this does not threaten the validity of the current study, but it is a common challenge in daily diary studies (Ohly et al., 2010).

The context in which the cadets operate is also important to consider. In this study, all cadets operated in a military setting with strict a hierarchical power structure. Although filling out the surveys was voluntary, it may not have been perceived as such. This means that the cadets may have answered the surveys because they feel like they have to. A potential consequence is an agreeing response set, which is a general "acquiescence" tendency that results in agreement with the rather general and authoritative statements of most questionnaires (Couch & Keniston, 1960). Thus, the cadets' response to the questions in the survey may not reflect their true feelings. However, prior to boarding the sail ship, all cadets were informed that the results from the study could later be used for their own leadership development. It is assumed that this information may increase the likelihood of the cadets filling out the surveys because they want to, rather than because they have to.

Another aspect to consider is the fact that the cadets continually rotated on job roles, including the leadership role. Assuming that neither of the cadets have received extensive training in empowering leadership and self-leadership, it is possible, or even likely, that the influence of

development support on self-goal-setting is weaker in the current sample compared to an organizational setting with a formal leader. After all, a prerequisite for leaders to be able to teach self-goal-setting is that they themselves have learned to implement this strategy.

Another limitation lies in the sample. It is possible that only people with a certain personality type will apply to the navy. It is also possible that the selection process of the naval academy contains preferences for a certain personality type. For instance, the sample consisted of 78,2% male and only 20,7% female participants, ranging between the age of 19 and 30. This may reduce the overall generalizability of the results. However, because this study found significant relationships with the current sample, it is possible that these relationships become even stronger in a more diverse sample.

The current study has demonstrated the importance of investigating the extent to which the different dimensions of empowering leadership works through different mediators. However, this was examined through separate analyses. Ideally, these mediators should have been tested together, meaning that while investigating one of the mediators, the other one should be controlled for. Because this was not done in the current study, it may only be concluded that each dimension, separately, works through different mediators. As such, one cannot rule out the possibility that both dimensions work through both mediators.

In relation to the different scales in the current study, some showed an internal consistency below the preferred value. With a daily diary study design, researchers usually make use of scales that are created to measure general tendencies, and then customize them in order to measure daily fluctuations instead (Breevaart et al., 2014a). This has also been done in the current study. A potential implication is that some of the subscales may refer to an experience which cannot be answered or measured every day. In turn, this may result in lower inter item correlations and lower internal consistency for the specific scale on that day (Sonnentag, Kuttler & Fritz, 2010). For instance, the autonomy support scale showed an internal consistency of .475 on one of the days, which is considered too low according to Pallant's (2013) guidelines. Although this is a potential limitation, scholars have argued that it is necessary to revise the scales in order to measure daily fluctuations (Ohly et al., 2010). Another aspect that may have contributed to lower internal consistency on some days is the length of the scales. According to Reis and Gable (2000), a daily diary study is relatively demanding for the participants as they have to fill out a survey every day. As such, the scales should be abbreviated in order to reduce the time that it takes for an individual to complete the survey. More specifically, it is recommended that it takes no longer than 6-7 minutes to complete the daily survey (Reis & Gable, 2000). Reducing the length of the questionnaire should, in turn, minimize

interference with work flow and maximize response rates (Breevaart et al., 2014b). However, with shorter scales comes lower internal consistency (Pallant, 2013). Despite this, the internal consistency doesn't appear to be problematic in the current study. For instance, the average internal consistency of the autonomy support scale was .625, where everything above .600 is considered acceptable (Pallant, 2013). In addition, having low reliability will first and foremost reduce the likelihood of obtaining statistically significant results (Lance, Butts & Michels, 2006). Yet, the current study found statistically significant results in all instances, providing support for each of the hypotheses.

The data in the current study was gathered through the use of self-reports. This may potentially increase the risk of common method variance (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003), which is systematical errors in the scores on the different variables as a function of the method used to gather the data. According to Conway and Lance (2010), self-reports may be appropriate, but the authors should always provide arguments for their decision to use self-reports. In the current study, it was recommended that the daily survey should not take longer than 6-7 minutes to complete (Reis & Gable, 2000), in order for the cadets to answer truthfully and to maintain a high response rate. If the cadets were to rate others in addition to oneself, completing the survey is likely to take considerably longer than 6-7 minutes. In addition, the current study aimed to examine how perceived leadership behaviour is related to followers' work engagement. Because job resources are considered the main predictors of work engagement (Bakker & Demerouti, 2007), and each job and each individual have their own constellation of job demands and resources (Bakker & Demerouti, 2007), the cadets themselves are the best source of information. Also, work engagement is a private experience and should therefore be rated by the person experiencing this state of mind (Breevaart et al., 2014a). Besides, common method bias is rarely strong enough to bias results (Doty & Glick, 1998; Spector, 2006).

Theoretical implications

The current study contributes to theory in several ways. To my knowledge, this is the first study to investigate dimension specific paths in the relationship between empowering leadership and work engagement. It is also the first study to examine how and why each dimension of empowering leadership contributes to work engagement. In addition, the results demonstrate the importance of studying daily fluctuations in work engagement, as most of the variance in work engagement (77%) was explained by variations at the day-level (i.e., within-person variance).

While previous studies have investigated the relationship between empowering leadership and work engagement between-persons, the current study went a step further by also considering within-person differences. Support was found for the relationships at both levels. According to the

homological views in theoretical modeling, if constructs are found to operate similarly across levels of analysis (between-persons and within-persons), it adds to the parsimony and breadth of theory (Kozlowski & Klein, 2000). As such, the current study adds to the parsimony and breadth of empowering leadership theory, as the results show that each dimension affects work engagement both at the person- and day-level.

Prior to the current study, it was unknown which of the empowering leadership behaviours that contributed to work engagement. The current study addressed this gap in the literature by being among the first few to make use of Amundsen and Martinsen's (2014) two-dimensional measure of empowering leadership. In this way, specific empowering leader behaviours are grouped into categories, and by investigating the separate effects of each category on work engagement, one can draw additional conclusions about the relationship. For example, in addition to knowing that empowering leadership facilitates work engagement, it may now also be assumed that coordination, information sharing, efficacy support and encouraging personal initiative, together, are autonomy supportive leader behaviours that function as job resources in promoting work engagement. Also, the joint effect of these behaviours is a motivational state in which the cadets feel psychologically empowered, which partially explains how and why the autonomy supportive behaviours leads to work engagement. Additionally, scholars now have reason to assume that the empowering leaders' role modeling, teaching and coaching, together, are development supportive behaviours that also function as job resources in promoting work engagement. These behaviours, or job resources, makes the cadets set more goals for themselves. In this way, the motivational potential of goal setting partially explains how and why these behaviours facilitate work engagement. Thus, the current study provides new knowledge in this area which can be used for further theory refinement.

The current study also helps justify the two-dimensional approach to empowering leadership (Amundsen & Martinsen, 2014). According to Knippenberg and Sitkin (2013), in order justify a multidimensional construct (i.e., empowering leadership), it needs to be specified how each dimension has a distinct influence on mediating processes and outcomes. In regards to the two-dimensional measure of empowering leadership, both dimensions were found to have a distinct influence on work engagement in addition to a distinct influence on mediating processes in this relationship. Additionally, this study contains theory that explains the role of each individual element in the multidimensional mediation model, including theory explaining the mediation processes by which each dimension affects the outcome. Thus, it meets the requirements proposed by Knippenberg and Sitkin (2013) in order for the model to make theoretical sense (p. 16). In this way, Amundsen and Martinsen's (2014) two-dimensional measure of empowering leadership is defended

against some of the critiques that Knippenberg and Sitkin (2013) made against the multidimensional measure of transformational leadership.

Practical implications

Maintaining a high level of engagement among employees is important for organizations, as it contributes to the enhancement of work-life and promotes well-being (Bakker & Demerouti, 2008). As such, it has become increasingly more important to develop theories and interventions that target work engagement. In this instance, the current study may be practically useful by providing a baseline from which new theories and interventions can be developed. The results show that leaders, through autonomy- and development support, may increase the overall level of engagement among employees, even on a daily basis. In addition, the results show that psychological empowerment and self-goal-setting partially explains the influence of autonomy- and development support, respectively, on work engagement.

According to Bass (1997, p. 328), different styles of leadership can be learned. In this way, leaders have a choice regarding what type of leader they want to be. This also implies that it is possible to train an individual to become an empowering leader. Thus, if an organization needs to make the subordinates more engaged, they can implement interventions targeting management and thereby teach the leaders to become empowering leaders. Once the training is complete and the leaders start to engage in autonomy- and development supportive behaviours, employees should become more engaged in their work. As such, this study goes beyond merely stating that empowering leadership interventions will contribute to work engagement. This study makes clear suggestions as to which behaviours should be included in these interventions. More specifically, empowering leadership interventions should be developed on the basis of Amundsen and Martinsen's (2014) two-dimensional measure of the concept. This is because other measures of the concept may include other behaviours than what has been investigated in the current study. As such, one cannot know whether these "other" behaviours are related to work engagement in the same way.

Previous studies have suggested that organizations should invest not only in leadership training for the formal leaders, but also in self-leadership training for the employees (Breevaart et al., 2016). If organizations were to follow this suggestion, they would have to implement one intervention for the leaders, and another intervention for the employees. The current study suggests a more cost-effective approach where organizations only need to invest in one intervention. According to Amundsen and Martinsen (2014), role modeling and guidance are central behaviors in which the empowering leader provides opportunities for the cadets to learn and acquire self-

leadership skills. If the empowering leader is also an efficient self-leader, he or she can model this kind of behavior to the employees, or provide coaching and teaching. In either case, the employees will acquire self-leadership skills. Thus, an organization should implement an intervention for leaders only, that includes training in both empowering leadership and self-leadership. In this way, the employees will receive their training in self-leadership through the leader, instead of having to participate in an intervention. By teaching the employees to set their own goals (a self-leadership strategy), leaders maximize their chances of having an engaged and well-performing workforce because employees become capable of motivating themselves (Breevaart et al., 20016, p. 320). In addition, providing leaders with empowering leadership training should have positive outcomes in terms of employee empowerment and engagement (Albrecht & Andreetta, 2011).

The current study may have relevance for knowledge-based organizations, in particular. First, the nature of work has changed substantially in the last decades by becoming more complex and cognitively demanding (Humphrey et al., 2007). As a result, highly skilled and educated knowledge workers have become the core of a rapidly growing segment of the workforce (Parker, Wall, & Cordery, 2001). From a strategic human management perspective, it is important to match leadership style with employment modes to attain an efficient use of human capital (Amundsen & Martinsen, 2015, p. 318). The logic of Amundsen and Martinsen's (2014) two-dimensional measure of empowering leadership, with its emphasis on employees' autonomy, motivation and development, appears to be well-suited a knowledge-based employment approach to human capital (Liu, Lepak, Takeuchi, & Sims, 2003). In addition, knowledge workers are to a greater extent driven by intrinsic than by external motivational factors (Frost, Osterloh & Weibel, 2010). In this way, psychological empowerment and self-goal-setting become central constructs in knowledge-based organizations, as they both involve intrinsic motivation. Because the dimensions of empowering leadership were found to facilitate psychological empowerment and self-goal-setting among the subordinates, and due to their importance in this context, it is recommended that knowledge-based organizations should emphasize these constructs by including empowering leadership as prioritized management practices in their human resource strategy.

Suggestions for future research

The specific sample and context in which the proposed relationships were examined may restrict the generalizability of the results. Although the findings were in in line with theoretically derived hypotheses, they should be replicated in different samples of employees working under different conditions. For instance, drawing from the section above, it would be interesting for future research to test the proposed relationships in a knowledge-based organization, as there is reason to believe

that the relationships might become even more evident in such a context. In addition, there is reason to believe that the relationship between development support and self-goal-setting may be stronger in a different context. Because the cadets rotated on the leadership role, it is unlikely that the leader on a specific day was perceived to have status, power, success and/or competence. As such, observational learning should be less effective (Sims & Lorenzi, 1992). Also, the cadets are unlikely to be effective self-leaders without having received any form of training. An implication here is that the leader is unable to provide coaching or teaching in self-leadership, and thereby self-goal-setting. It is worth noting, however, that due to the specificity of the current context (being trained on a sail ship for a longer period of time), the current study provided a special opportunity to examine the hypotheses in a highly controlled (i.e., few influences from the outside), but at the same time dynamic (e.g., rotating on job roles and guard shifts) work context.

In terms of empowering leadership and self-leadership, the current study chose not to treat these variables as unitary constructs. Rather, empowering leadership was treated as two distinct dimensions (Amundsen & Martinsen, 2014), and only the self-goal-setting strategy of self-leadership was examined. Conversely, psychological empowerment and work engagement was treated as higher order constructs. For psychological empowerment, this was largely due to the additive nature of it's components. However, according to Heuvel and colleagues (2010), it is useful to include personal resources separately, as oppose to combining them into a higher order construct (i.e., PsyCap or psychological empowerment). This is because being able to distinguish between the impact of different resources will inform the design of targeted interventions (Heuvel et al., 2010, p. 141). As such, it would be interesting for future research to investigate the relative contribution of each component of psychological empowerment on work engagement. Additionally, the current study only investigated self-goal-setting as a mediator in the proposed relationship. Researchers should therefore extend the current study by also including other strategies of self-leadership.

Previous studies have shown that employees' need for leadership is important to consider when measuring the relationship between leader behaviours and employee outcomes (Breevaart et al., 2016; de Vries, 1997). Breevaart and colleagues (2016) argued that when the need for leadership is high, it is best to engage in transformational leadership, while self-leadership is more beneficial when the need for leadership is low. Thus, when the need for leadership is high, work engagement is optimized when the leader engages in leader behaviours. On the other hand, when the need for leadership is low, the leader should not interfere, but rather let the employees lead themselves. The current study, however, suggests that this may not be the case for empowering leadership. To be more specific, the results suggest that engaging in empowering leadership behaviours might be optimal for work engagement, regardless of the need for leadership. For instance, in a situation

where employees have high levels of autonomy and feel competent, the need for leadership should be low (de Vries, Roe & Taillieu, 2002). Accordingly, self-leadership is optimal for work engagement, while engaging in leader behaviours is not. However, one of the main goals of empowering leadership is to teach others to lead themselves (Amundsen & Martinsen, 2014, 2015; Manz & Sims, 1989, 2001). Thus, when engaging in development supportive leader behaviours, even when the need for leadership is low, the cadets learn to make use of self-goal-setting (a self-leadership strategy), which is beneficial in regards to work engagement in such a context. Unfortunately, one cannot make this assumption solely on the basis of the current study. It would, however, be interesting for future research to investigate whether or not the need for leadership affects the influence of empowering leadership on different outcomes.

Although the current study defends the two-dimensional measure of empowering leadership (Amundsen & Martinsen, 2014) from some of the critiques that Knippenberg and Sitkin (2013) made against transformational leadership, there are still aspects of this critique that has not been covered. More specifically, this study makes no case for empowering leadership as a unitary construct. According to Knippenberg and Sitkin (2013), shared mediation paths are a precondition for the notion of a unitary construct. In this way, the autonomy- and development support dimensions cannot be a part of the same unitary construct (empowering leadership) unless they affect the same mediators (Knippenberg & Sitkin, 2013). In the current study, each dimension was found to affect work engagement through different mediators. It was not examined whether autonomy support affects work engagement through self-goal-setting in addition to psychological empowerment, and whether development support facilitates work engagement through psychological empowerment in addition to self-goal-setting. It is also worth noting that, for instance, a case for the mediating role of psychological empowerment, in the influence of autonomy support, cannot be generalized to a case for the mediating role of psychological empowerment for empowering leadership as a whole (Knippenberg & Sitkin, 2013). As such, one cannot conclude, on the basis of this study, that the relationship between empowering leadership and work engagement is mediated by psychological empowerment and self-goal-setting. After all, the findings in the current study are dimension specific, suggesting that each dimension's path to work engagement is unique to that dimension only. However, this does not imply that shared mediation is unlikely in this regard. For instance, it has been found that autonomy is essential for self-leading individuals by creating opportunities for the expression of self-leadership (Ho & Nesbit, 2014). Additionally, development supportive behaviors have been found to influence some of the components of psychological empowerment. For example, coaching may improve subordinate's feelings of competence at work (Kwak & Jackson, 2015). Accordingly, it is possible that both autonomy- and development support affects psychological

empowerment and self-goal-setting, but the current study didn't test for this shared mediation. Alternatively, autonomy support may indirectly influence self-goal-setting through psychological empowerment, and development support may indirectly influence psychological empowerment through self-goal-setting. Support for this alternative possibility is found in Houghton and Yoho's (2005) article, where they considered psychological empowerment and self-leadership to be sequential variables, with self-leadership operating as a mediator between empowering leadership and psychological empowerment. They also pointed out, however, that this relationship may be multidirectional, in that "a person experiencing feelings of meaning, competence, self-determination and impact may be more likely to engage in self-leadership behaviors" (p. 68). Thus, it is possible, or even likely, that the mediation paths in this regard are shared rather than unique. However, more research is needed in this area to determine whether or not the autonomy- and development support dimensions are parts of the same unitary construct.

The current study only found partial mediating effects, meaning that some variance is still left to be explained. As such, future research may extend the results of the current study by including additional mediators. If scholars were to follow this suggestion, they should also adopt the two-dimensional approach to empowering leadership, and include theory explaining the role of each dimension and the mediation processes by which each affects work engagement (Knippenberg & Sitkin, 2013). Drawing from the current study, scholars may use theories regarding resources (i.e., Job demands-resources model, conservation of resources theory) and theories concerning motivation (self-determination theory, goal-setting theory) to guide them in the process of uncovering additional mediators in this relationship.

Finally, due to the design of the current study, reversed causality cannot be ruled out. More specifically, it is possible that on days when the cadets were more engaged, they experienced more feelings of meaning, competence, self-determination and impact, set more goals for themselves, and consequently rated their leaders more favorably on that day. However, this particular design was consciously chosen to capture short-term, same day effects of empowering leadership on work engagement. In order to establish causality, future research may use multiple measurement points a day. For instance, empowering leadership may be measured right after lunch and work engagement at the end of the day.

Conclusion

The modern organizations in today's society expect their employees to be proactive and show initiative, take responsibility for their own personal development, and to be committed to high quality performance standards (Bakker et al., 2008, p. 188). Thus, these organizations need

employees who feel energetic, dedicated and absorbed, or in other words, they need employees who are engaged in their work (Bakker & Schaufeli, 2008). A commonality for these organizations is that leadership will most likely always be present. In this way, it becomes important to acquire information about how leadership can contribute to work engagement among employees. As such, the purpose of the current study was to investigate whether an empowering leadership style, in the form of autonomy- and development support, plays a role in facilitating work engagement on a daily basis, and to shed light on the underlying mechanisms of these two relationships.

The results provide support for the notion that both dimensions of empowering leadership make separate contributions to work engagement among employees. More specifically, the results show that feelings of psychological empowerment partially explain how autonomy supportive behaviours facilitates work engagement, and that self-goal-setting partially explain the link between development supportive behaviours and work engagement. Thus, on days when the leader engages in more autonomy- and development supportive behaviours, employees should feel more psychologically empowered and set more goals for themselves, which ultimately should make them become more engaged in their work, on these days. According to the Job demands-resources model (Bakker & Demerouti, 2008), this is because job resources (autonomy-and development supportive behaviours) start a motivational process that leads to work engagement. Also, job resources (i.e., autonomy support) have been found to breed personal resources (i.e., psychological empowerment) which ultimately results in increased engagement at work (Xanthopoulou et al., 2007). As for self-goal-setting, this strategy also enhances engagement at work, and may be taught to the employees through role modeling and/or coaching and teaching.

This study makes several new contributions to the literature. First, as far as I know, this is the first study to account for the dynamic, short-term effects of empowering leadership behaviours on work engagement. This is especially important in studies on work engagement, as research have shown that this is not a stable characteristic, but rather a state that fluctuates from day-to-day (Bakker et al., 2011; Sonnentag, 2003; Xanthopoulou et al., 2009). Second, this study is among the first few to make use of Amundsen and Martinsen's (2014) two-dimensional measure of empowering leadership. In this way, it is clearly specified which behaviours are included in the construct and why. Lastly, no other studies have investigated how each dimension of empowering leadership contributes to work engagement. By including psychological empowerment and self-goal-setting as mediators in this area of inquiry, the current study helps "move organizational research beyond dust-bowl empiricism and toward a true science." (DeShon & Bergh, 2008). In addition, by specifying how each dimension has a distinct influence on mediating processes and outcomes, the current study defends the two-dimensional measure of empowering leadership (Amundsen & Martinsen, 2014) from some

of the critiques that Knippenberg and Sitkin (2013) made against transformational leadership. Thus, rather than moving back to the conceptual drawing board, researchers adopting the two-dimensional measure of empowering leadership may proceed with confidence.

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